Engineering News-Record

1977

July-December

Vol. 199

index

...of editorial content

McGraw-Hill Publications Company
1221 Avenue of the Americas, New York, N.Y. 10020

Engineering News-Record index

C O N T E N T

Part I—Subject Index

The index includes all articles that have appeared within the dates covered, with the exception of certain Briefs (such as Labor Briefs, Careers) and Obituaries.

The subject headings under which all articles are indexed appear in alphabetical order. Within the subject headings the entries are listed chronologically.

Many important headings are divided into subheadings, for example, BRIDGES—by states or countries; CITIES—by name; BUILDINGS—by type (churches, garages, etc.).

International coverage is shown under the letter "I." The items here listed geographically also appear under the appropriate subject headings.

Part II—Names

Part II of the index contains names of authors, personalities, and companies. Listed here are the names of people who are the subject of articles; names of authors of by-lined articles and published letters; and names of firms about which articles were written.

Individuals or firms simply mentioned in feature articles about various construction projects are seldom indexed by name. Those, on the other hand, who are listed under **Names** will usually not appear under the subject heading. For example, an article about the Smith Construction Co. appears only in the **Names** section and will not be found under the heading CONTRACTORS.

Part III—Product Manufacturers

Items that describe new materials and equipment, including Product Briefs, are indexed under this heading, by manufacturer's name.

T E R M S U S E D

See means that all entries on the subject will be found under another heading: EXCAVATING, **see:** SOIL.

See also means that a related heading should also be checked: SEWAGE, **see also**: WATER POLLUTION.

The following abbreviations and signs are used:

RC —Reader Comment
CW —Construction Week
WO —Washington Observer
B —Brief and Around the World
e —Editorial
** —Article with several illustrations
* —Illustrated article (if asterisk precedes entry, reference is to a picture with caption only.)

ENGINEERING NEWS RECORD is published every Thursday. There are 25 or 26 issues in each half-yearly volume, covering January to June and July to December, starting with vol. 78 in 1917, when ENGINEERING NEWS and ENGINEERING RECORD joined forces under the present title.

Engineering News-Record index

JULY-DECEMBER 1977

Part I

A

ACCIDENTS, DISASTERS, FAILURES, SAFETY see also: COLLAPSES, EARTHQUAKES, FIRES, FLOODS, WEATHER

Australia derailment inevitable. B p17 ..... Jul 7
Fatal Alaska pipeline blast levels pump bldg.,**. p10 ..... Jul 14
Window-watching again in Boston's Hancock Tower. CW p3 ..... Jul 21
Alaska pipeline blast laid to safety violations. CW p3 ..... Jul 21
NYC: lightning strikes out Con Ed, map,**. p12 ..... Jul 21
Corroding bridges stall Cleveland's SOHIO project,**. p13 ..... Jul 28
Alaskan oil flowing after third shutdown. p13 ..... Jul 28
Boston Hancock windows will get 18-hour watch,*. p15 ..... Jul 28
Brazil: epoxy asphalt cracks on box girder bridge. p15 ..... Jul 28
Reducing blackout problems. e p72 ..... Jul 28
and RC p4 ..... Dec 8
Deficiencies found in Pueblo Dam,*. p12 ..... Aug 4
Tarbela generator fails,*. p12 ..... Aug 4
and RC p5 ..... Nov 10
Roads generally fare well during heat wave. p16 ..... Aug 4
Decaying pontoons may sink Istanbul's Galata Bridge,**. p18 ..... Aug 4
Boston's Hancock loses 23rd new window. CW p3 ..... Aug 11
NYC: decaying closed viaduct torn down,*. p14 ..... Aug 11
FPC cites deficiencies leading to NYC blackout. p15 ..... Aug 11
Damage in Taiwan typhoons. B p17 ..... Aug 11
Probe widens for faulty electroslag welds, drawing,*. p10 ..... Aug 18
and e p72 ..... Aug 25
and RC p4 ..... Nov 3
Faulty weld cited in Pa. powerplant explosion. p16 ..... Aug 18
Brick-clad concrete proves troublesome at London apt bldg. p10 ..... Aug 25
10-month-old N.C. hwy crumbling. p15 ..... Aug 25
and RC p16 ..... Oct 6
Pa.: heavy rains, poor soil force internal sewer repair. p20 ..... Aug 25
NYC Con Ed blackout report cites malfunctions, slow response. p8 ..... Sep 1
Frankfurt earthfill fails, no casualties,*. p13 ..... Sep 1
Water floods D.C. Metro as three seals fail. p13 ..... Sep 1
Boston: another Hancock pane pops. p15 ..... Sep 1
Flooding probes begin as D.C. Metro reopens. CW p3 ..... Sep 8
Tarbela reservoir filled to the brim. CW p3 ..... Sep 15
Crack, weld problems shut W. Va.'s Silver Bridge,*. p10 ..... Sep 15
and RC p4 ..... Dec 15
U.S. sues over Phila.'s sinking courthouse/office bldg.,*. p11 ..... Sep 15
Redesign cures deteriorated Newark roof parking deck, drawing,*. p12 ..... Sep 15
Salvaged Hancock windows are cracking up in Me. p15 ..... Sep 15
Lessons from sinking Calif. courthouse. RC p11 ..... Sep 2;
and RC p9 ..... Nov 24
Major erosion hits Tarbela Dam again; earlier problems, drawings,**. p37 ..... Sep 22
Three men killed when scaffold falls 13 stories at Boston hospital job. p45 ..... Sep 22
Marine crane hits San Fran-Oakland Bay Bridge. p49 ..... Sep 22
Chloride attack forces Calif. bridge column replacement,**. p20 ..... Sep 29
GSA's faulty foundations a problem; list of bldgs,**. p37 ..... Oct 6
and RC p10 ..... Nov 17
and RC p4 ..... Dec 8
Another crash repair program begins at Tarbela Dam, drawing,*. p39 ..... Oct 6
Corroded rebars collapse Tex. high school stadium stand,**. p42 ..... Oct 6
Phila. treatment plant spills four tons of chlorine gas. p13 ..... Oct 13
NYC Third Water Tunnel fire takes job's 17th life. p11 ..... Oct 20
and RC p5 ..... Dec 8
Crumbling Miami hotel faces razing. p12 ..... Oct 20
Excessive deflection hits concrete canopies at D.C. rail station,*. p16 ..... Oct 20
Foundation woes a chronic GSA problem,*. p10 and e p80 ..... Oct 27
Alaska pipeline pump station repair in high gear. p18 ..... Oct 27
Nation's roads deteriorating rapidly, chart, table. p14 ..... Nov 10
British investigate post-war steel frames corrosion. p20 ..... Nov 10
Ninian oil platform deck repaired. B p20 ..... Nov 10
Tarbela Dam: new erosion problem solved. p15 ..... Nov 17
New owners to repair landmark Chrysler Bldg,**. p18 ..... Nov 17
Rio apt. bldg. shored against sinking into beach. p20 ..... Nov 17
Rains, poor base crumbled N.C. road. p29 ..... Nov 17
El Paso performing arts center suit increased to $10-m by contractor. p13 ..... Dec 1

• Safety

North Sea oil platform flaw detection method sought. p15 ..... Jul 7
Calif. capitol restructured for quake survival,**. Cover and p18 ..... Jul 14
Worker safety under study; new probe threatens OSHA. p13 ..... Jul 21
Diving safety rules surface. CW p3 ..... Jul 28
Marshall says Carter backs OSHA; unveils paper work reduction plan,*. p59 ..... Jul 28
U.S. to host fire safety sales group in Moscow. CW p3 ..... Aug 4
House opens hearings on federal fire code. p16 ..... Aug 4
Eiffel Tower still sound. B p17 ..... Aug 11
OSHA: it's bad, but what's better? e p64 ..... Aug 11
Use of helicopter, jacking frame speeds Calif. drawbridge repair,*. p16 ..... Aug 18
Study of combustibles in prisons. B p25 ..... Aug 18
Combined bar joist and sprinkler system, Hydra-Strut, cuts cost, drawings. p29 ..... Aug 18
OSHA offers states 90% funding for safety consultations. p14 ..... Aug 25
Problem asbestos at N.J. schools gets sealant coat,*. p11 ..... Sep 1
Insulation safety standards a must, say advocates. p11 ..... Sep 1
OSHA walk-around pay policy expected to be challenged. p12 ..... Sep 8
U.S. to put sprinklers in federal prisons. p13 ..... Sep 8
Nominee to OSHA review panel may bring pro-labor tilt. WO p7 ..... Sep 15
Architect not in construc, says OSHA. p39 ..... Sep 22
BuRec findings conflict on Auburn Dam safety. p13 ..... Sep 29
Ohio contractor settles OSHA discrimination case. p137 ..... Oct 6
OSHA speeds curbs on carcinogens. p15 ..... Oct 13
NIOSH: worker exposure to asphalt should be limited. p76 ..... Oct 20
BuRec sets stiffer procedures to assure dam safety,*. p11 ..... Oct 27
OSHA 'walk-around' pay may be challenged. p58 ..... Oct 27
Calif. safety board requires circuit breakers. p58 ..... Oct 27
CPSC safety suit questions old aluminum wiring. p9 ..... Nov 3
Dam collapses in Southeast spur federal inspection plan, map,**. p13 ..... Nov 10
Insulation flammability probed. CW p3 ..... Nov 17
Ga. finds 10 potential problem dams. p22 ..... Nov 17
Supreme Court action makes owners liable for safety (Nev.). p91 ..... Nov 17
NRC checks faulty Mich. A-plant safety wiring. p13 ..... Nov 24
Calif. safety program results: injuries drop 26%. p59 ..... Nov 24
Pa. utility hot line for quick location of buried lines. p16 ..... Dec 1
White House spurs dam inspection,**. p9 ..... Dec 8
and e p72 ..... Dec 15
Chute, slide speed escape from fires in high-rises. p17 ..... Dec 8
OSHA inspectors must make walk-around pay rule known. p59 ..... Dec 8
OSHA will drop a number of 'nit-picking' standards,*. p55 ..... Dec 15
Court says OSHA doesn't protect workers who refuse dangerous jobs. p56 ..... Dec 15
London Tower Bridge vibrations. B p56 ..... Dec 22

ACOUSTICS, NOISE CONTROL

EPA hits tractors with new noise rules. p15 ..... Jul 21
Wraparound roof straddles West Berlin's Congress Center to quiet din, drawings,**. p26 ..... Nov 24

ADHESIVES, COATINGS, INSULATION, PAINT

Energy program's home insulation subsidy hit by FTC probe. p57 ..... Jul 14
Brazil: epoxy asphalt cracks on box girder bridge. p15 ..... Jul 28
TVA cuts heating costs 33% in pilot insulation program. p13 ..... Aug 11
Canada re-insulating homes. B p17 ..... Aug 11
NAHB fears insulation shortages could slow home and bldg construc. WO p7 ..... Sep 1
Problem asbestos at N.J. schools gets sealant coat,*. p11 ..... Sep 1
Insulation safety standards a must, say advocates. p11 ..... Sep 1
Insulation shortages stall housing work. CW p3 ..... Nov 10
Insulation flammability probed. CW p3 ..... Nov 17
NAHB guidelines for insulating houses. B p29 ..... Nov 17
Insulation labeling standards proposed by FTC. CW p3 ..... Dec 1
W. German insulation subsidies. B p17 ..... Dec 1

AERONAUTICS, see: AIRCRAFT; AIRPORTS; SPACE

AID, see: INTERNATIONAL

AIR CONDITIONING, HEATING, VENTILATION

Energy crisis spotlights ASHRAE and boosts demand for its know-how,*. p16 ..... Jul 7
Calif. building energy code still not resolved. p14 ..... Jul 21
White House solar options considered in ERDA study. p17 ..... Jul 21
Heat pump misuse costs more. B p21 ..... Jul 21
Cheap sun power possible through photovoltaic material. p15 ..... Jul 28
TVA cuts heating costs 33% in pilot insulation program. p13 ..... Aug 11
Calif. licensing boards to evaluate energy conservation skills. p13 ..... Aug 18
Newark: PSE & G HQ's heat will be 96% recovered energy. p14 ..... Aug 18
Proposed tax incentives brighten Dallas solar trade show. p14 ..... Sep 8
Rock Store '77, Stockholm meeting, told underground storage saves energy. p16 ..... Sep 29
and e p80 ..... Oct 13
Solar retrofits for Calif. state bldgs. B p50 ..... Oct 6
Subterranean design for energy-efficient Sacramento State Office wins competition,*. p14 ..... Oct 13
All-electric combination cuts Ohio Goodrich facility energy costs. p17 ..... Oct 13
Hyatt Regency conservation. RC p4 ..... Nov 3
Solar projects, energy programs get mixed reviews at Bldg Construc Expo and Conf,**. p19 ..... Nov 10
Manual on energy conservation planning B p20 ..... Nov 10
Wyodak, Wyo.: arid, coal-rich site gets biggest air-cooled powerplant, drawing,**. p27 ..... Nov 10
Sun showers for hotel guests. CW p3 ..... Nov 17
Calif. advocates pro-solar standards. p14 ..... Nov 17
Energy, housing rehab big at British show, Interbuild. p14 ..... Nov 24
Bell retrofits for energy savings,*. p13 ..... Dec 8
Japan eyes energy conservation. B p19 ..... Dec 8
HVAC ducts climb outside walls to shorten bldg at Salt Lake City VA hospital, drawings. p22 ..... Dec 8
Solar plans still alive at Citicorp. p17 ..... Dec 15
Navy's seawater cooling system would cut energy needs. p54 ..... Dec 22

AIRCRAFT, AIR LIFT

Use of helicopter, jacking frame speeds Calif. drawbridge repair,*. p16 ..... Aug 18
Helicopter eases Ohio Edison's pipe removal,**. p25 ..... Aug 18
Japan: toy plane eases tough cable spanning job,*. p16 ..... Sep 8
and RC p16 ..... Oct 6

AIR FORCE

Air Force set to launch $437-m aeropropulsion test facility in Tenn.,**. p20 ..... Jul 7
Record wooden structure, N.M.'s Trestle Project at Kirkland AFB, to test atomic blast effects, drawing,**. Cover and p18 ..... Sep 29
$800-m Vandenberg AFB space shuttle project set for blast-off, drawing. p53 ..... Oct 6

AIR POLLUTION, see: HEALTH

AIRPORTS, see also: BUILDINGS • Terminals, • Hangars; PAVING

Future needs for metrop. airports 10 or one. B p29 ..... Nov 17

• American

California

San Diego to expand Lindbergh Field. p12 ..... Nov 3

Colorado

Sand is solution to casting stronger overpass deck for Denver runway,**. p12 ..... Sep 1

D.C.

Dulles airport terminal expansion set to take off. p15 ..... Dec 8

Georgia

Atlanta airport, MARTA drawings just don't add up. p24 ..... Nov 17

New York

NYC's La Guardia lands new terminal. CW p3 .. Dec 1

Ohio
Cleveland: Sunken hub airport may rise miles offshore in Lake Erie. p13 ... Aug 11

Pennsylvania
Phila bars payment of airport work extras. p48 ... Sep 22

South Carolina
Fast runway repaving bars penalty,*. p11 ... Jul 28

Texas
Dallas/Ft. Worth Airport expanding. p14 ... Sep 15

• Foreign
Mexico City airport improvement. B p29 ... Nov 17
Saudi Arabia: Glass, concrete triangles, roof Riyadh airport terminals,**. p15 ... Nov 17
USSR: Germans rush Moscow airport terminal job,*. p13 ... Nov 3

AIR RIGHTS, see: BUILDING DESIGN; CITIES; LEGAL DEVELOPMENTS

ALUMINUM, see also: PRODUCT MANUFACTURERS
Mich. thermal window standard. B p25 ... Aug 18
CPSC safety suit questions old aluminum wiring. p9 ... Nov 3

AMERICAN Associations, Societies, etc—see subject

ANCHORS, see: BEAMS, COLUMNS, FRAMES

APARTMENTS, see: BUILDINGS

APPALACHIA, see: ECONOMY; HIGHWAYS

APPRENTICESHIP, see: EDUCATION
see also: ETHICS • Civil Rights

AQUEDUCTS, see: WATER RESOURCES

ARCHES, see: BRIDGES; CONCRETE; LUMBER; ROOFS; STEEL

ARCHITECTURE, see also: BUILDING DESIGN; PLANNING & ENVIRONMENT
Hancock Tower AIA award a joke? RC p5 ... Jul 7
ENR on architects. RC p5 ... Jul 7
Supreme Court clears way for A-Es to advertise,*. p8 and e p74 ... Jul 7
Advertising by design professionals. e p74 ... Jul 7
and RC p4 ... Jul 28
Professional liability premiums soar. p13 ... Jul 14
GAO trims scope of Brooks procurement law. p16 ... Jul 14
Fire group to train designers. p16 ... Jul 21
Betz uses stock plan to sell its A-E firms to employees. p67 ... Jul 21
Suspended architect sues AIA. CW p3 ... Jul 28
U.S. agencies should sue A-Es more often, GAO report says. p10 ... Jul 28
and RC p10 ... Sep 22
and RC p5 ... Oct 20
Knoxville adopts new ABA procurement code. p10 ... Jul 28
and RC p5 ... Aug 18
New York A-Es will be free to advertise fees. p13 ... Aug 4
Senate plans probe on federal use of expert consultants. WO p7 ... Aug 18
Calif. licensing boards to evaluate energy conservation skills. p13 ... Aug 18
Profit picture brightens for construc, chart, tables. p8 ... Sep 8
and RC p4 ... Dec 1
Calif. procurement study started. p84 ... Sep 8
ACEC plans preemptive action on ABA procurement code. WO p7 ... Sep 15
Corps asks construc exemption from premerger notification rules. WO p7 ... Sep 22
Architect not in construc, says OSHA. p39 ... Sep 22
House hearing on A-E selection no threat to Brooks Law,*. p50 ... Sep 29
SBA redefines A-E 'small business'. p50 ... Sep 29
Calif. architects want continuing education rule. p134 ... Oct 6
AIA, PC members to swap data on complex building products. p11 ... Oct 20
Industry pension plans in danger. p75 ... Oct 20
Fairfax County, Va. design-build contracts attacked. p76 ... Oct 20
Professional societies mount campaign against wage busting bill. CW p3 ... Nov 3
Societies win wage busting battle with GAO help. WO p7 ... Nov 10
U.S. millions make Egypt bright market for A-Es, map. p37 ... Nov 17
AIA, NSPE plan to drop NCIC membership. CW p3 ... Dec 8
A-Es may debate procurement issue. CW p3 ... Dec 8
Calif. bill on architects' continuing education dumped for voluntary plan. p15 ... Dec 8
Former HUD man eyed by AIA,*. p17 ... Dec 8
New AIA chief Botsai urges competence,*. Cover and p23 ... Dec 8
Va. architect guarantees hospital project cost in writing,*. p40 GO ... Dec 8
AIA left NCIC over policy differences. CW p3 ... Dec 15
New model A-E selection code proposed by NSPE. WO p7 ... Dec 15
Architect heads GSA's PBS. p43 ... Dec 22
New OMB rules spell out when consultants are to be hired,*. p176 ... Dec 22
AIA drops out of NCIC. e p188 ... Dec 22

ARCTIC, see: WEATHER; SOIL

ASPHALT, see: PAVING

ASSOCIATED GENERAL CONTRACTORS, see: CONTRACTORS

ASSOCIATIONS, see subject
see also: MEETINGS

ATOMIC ENERGY, RADIATION, see: NUCLEAR

AUDITORIUMS, see: BUILDINGS

AUGERS, see: EQUIPMENT • Drilling

AUTOMATION, see: COMMUNICATIONS, AUTOMATION

AWARDS
Hancock Tower AIA award a joke? RC p5 ... Jul 7
Boston's Hancock AIA award an insult. RC p4 ... Jul 28
and RC p9 ... Nov 24
Boston's Hancock Tower wins AISC beauty award. p17 ... Aug 4
Beavers honor heavy construc leaders. CW p3 ... Nov 10
Fla. Audubon Soc. honors conservationist. B p17 ... Nov 24
AGC to get public interest award. p58 ... Nov 24
St. Louis Man of the Year award to Mantia,*. p59 ... Dec 8

B

BARGES, see: NAVIGATION; TRANSPORTATION

BEACH PROTECTION, see: SOIL
see also: DAMS; WALLS

BEAMS, COLUMNS, GIRDERS, TRUSSES; FRAMES see also: CONCRETE; STEEL
Ring girder holds Dallas' Reunion tower slipform. p21 ... Jul 28
Combined bar joist and sprinkler system, Hydra-Strut, cuts cost, drawings. p29 ... Aug 18
Okla City: Steel-frame Biltmore hotel to be blown up. CW p3 ... Aug 25
Girders replace London's aging arch bridges,*. p17 ... Sep 15
R.I. nursing home steel frame goes up in 12 hours,**. p14 ... Oct 20
British investigate post-war steel frames corrosion. p20 ... Nov 10
Portable prestressing bed produces columns, beams for Boise garage,**. p18 ... Nov 24

BIAS, see: ETHICS • Civil Rights

BIDS, see project in question;
see: CONTRACTS & BIDS

BITUMINOUS CONCRETE, see: PAVING

BLASTING, see: EXPLOSIVES

BOLTS, see: BEAMS & FRAMES

BONDS, BUDGETS, FINANCING (STATE AND LOCAL)
Contractors, banks discover each other,*. Cover, p32 and e p74 ... Jul 7
and RC p14 ... Oct 6
Pa. halts design on bond-backed roads. p15 ... Jul 21
Settlement of Indian claims could move Me. building. p15 ... Jul 28
N.H. budget veto bars starts on new state public works. p25 ... Aug 18
SEC blast on NYC may dislodge truth bill. p15 ... Sep 8
Me. Indian land claims stir fears about loans. p17 ... Sep 15
L.A. challenges tax-increment financing of urban redevelopment projects. p19 ... Sep 15
Communities shun 25% pollution-control loans. p12 and e p64 ... Sep 29
Bond-swap plan would keep Port Authority of NY/NJ in mass transit. p39 ... Oct 6
Rise in short-term interest rates stirs fears. p15 ... Oct 13
Three major toll routes remain in default, map,**. p20 ... Oct 13
Banks polish Big Apple with industrial loans. p14 ... Oct 20
Rush to borrow brings N.Y. state move to space bond sales. p14 ... Oct 20
Two referendums, one recount ensure Worcester civic center/sports arena start. p15 ... Oct 20
Optional plans for financing urban redevelopment considered. WO p7 ... Oct 27
Decision killing N.Y. state bond proposition appealed. p17 ... Oct 27
U.S. takes its seventh new-town bath. p17 ... Nov 10
Voters approve $2.1 billion in bonds, tables. p13 ... Nov 17
Failure of manufacturer worries R.I. economic officials (N.Y. State ref). p19 ... Nov 17
Miami's transit must pass voters. p11 ... Dec 1
Del. construc freeze ends, but workers are let go. p14 ... Dec 1
Gulf Oil will sell its equity in new town of Reston, Va. p15 ... Dec 1
N.H.: override of capital-budget veto fails. p17 ... Dec 1
Ill. Capital Development Board guides public construc. p55 ... Dec 1
Congress may find that truth hurts. p15 ... Dec 8
Homebuilders trip on bonding rules. p12 ... Dec 15
Toll boost on Chicago's ailing Calumet Skyway may swell maintenance fund. p43 ... Dec 22
Alaska: faulty estimate calls for another bond referendum. p43 ... Dec 22
Treasury kills Port Authority of NY/NJ mass transit financing plan. p45 ... Dec 22

BOOK REVIEWS
Engineers' Overseas Handbook, Revised Edition, by Commerce Dept. p19 ... Aug 4
The Path Between the Seas, by David McCullough. RC p5 ... Oct 20
and p28 ... Dec 8
Planning Water Quality Systems, by William Whipple, Jr.,*. p29 ... Dec 8
Environmental Impact Statements: A Guide To Preparation And Review, by Martin S. Baker, Joseph S. Kaming and Richard E. Morrison. p30 ... Dec 8
Foundation Analysis and Design, Second Edition, by Joseph E. Bowles. p40 NO ... Dec 8
Materials Handbook-Eleventh Edition, edited by George S. Brady and Henry R. Clauser. p40 NO ... Dec 8

BREAKWATERS, see: PORTS AND HARBORS; DAMS

BRICKS, TILES, MASONRY
Brick-clad concrete proves troublesome at London apt bldg. p10 ... Aug 25
Prefab brick panels double as formwork to slash costs at Dallas college,**. p28 ... Oct 13

BRIDGE DESIGN
Scotland's cable-stayed bridge is final link,*. p12 ... Jul 14
Deep, fast water spawns record concrete box girder span in Pacific, drawing,**. p21 ... Jul 14
England's cable-stayed twin rail bridge is a first for Europe,*. p13 ... Aug 11
Massive caissons sunk for record Mississippi R. Bridge, drawing,**. p20 ... Aug 11
Cables to carry Mississippi R. Bridge twin steel box girder superstructure,*. p23 ... Aug 11
Bridge designer Arvid Grant blasts U.S. bridge design art,**. Cover and p26 ... Aug 18
and RC p14 ... Oct 6
and RC p9 ... Nov 24
and RC p8 ... Dec 22
N. America's record precast cable-stayed bridge spans Columbia R.,**. p27 ... Aug 18
Europe's longest curved box girders hurdle obstacles in Brussels,**. Cover and p18 ... Oct 20
Wash.-Ore I-205 bridge will be longest segmented structure in North America,*. p16 ... Nov 17
Pasco-Kennewick cable-stayed bridge in starring role at Wash. State Symposium,**. p50 ... Dec 22

BRIDGES
Bridge designer Arvid Grant blasts U.S. bridge design art,**. Cover and p26 ... Aug 18
and RC p14 ... Oct 6
and RC p9 ... Nov 24
and RC p8 ... Dec 22
Poll shows Americans want better roads, bridges. CW p3 ... Sep 15
FHWA report calls for repair of 8,000 miles of Interstate,*. p11 ... Oct 13
Pa. researchers claim oil, spirits bath prolongs concrete bridge deck life. p15 ... Nov 10

• American
Alabama
Winner outbids 13 for bridge job, unit prices. p56 ... Jul 28
Truck's load drops bridge span. CW p3 ... Oct 27

Arkansas
Winner takes bridge job by 1% margin, unit prices. p56 ... Nov 24

California
Use of helicopter, jacking frame speeds Calif. drawbridge repair,*. p16 ... Aug 18
Marine crane hits San Fran-Oakland Bay Bridge. p49 ... Sep 22
Antioch Bridge piers, girders, deck go up all at once,**. p54 ... Sep 22
Chloride attack forces column replacement,**. p20 ... Sep 29
San Fran Dumbarton Bridge moves to bid. B p29 ... Nov 17

Colorado
Fire twists Denver steel bridge girders,**. p14 ... Jul 21

D.C.
Predawn crew sets temporary rail bridges,**. p14 ... Nov 24

Florida
Winner takes bridge by 1% margin, unit prices. p48 ... Sep 29

Georgia
Winner only one under bridge estimate, unit prices. p64 ... Jul 21
Winner takes bridges by 0.1% margin, unit prices. p56 ... Aug 4
MARTA rail bridge bypasses roadblock,*. p15 ... Nov 3
Low bidder 12% under bridge estimate. p40 ... Nov 3

Illinois
Chicago's Calumet Skyway: three major toll routes remain in default, map,**. p20 ... Oct 13
Toll boost on Chicago's ailing Calumet Skyway may swell maintenance fund. p43 ... Dec 22

Louisiana
Massive caissons sunk for record Mississippi R. Bridge, drawing,**. p20 ... Aug 11
Cables to carry Mississippi R. Bridge twin steel box girder superstructure,*. p23 ... Aug 11

New Jersey
Collapsed span raised for reuse,*. p10 ... Aug 25

New York
NYC: Decaying closed viaduct torn down,*. p14 Aug 11
NYC's George Washington bridge gets pre-paved deck overnight,**. p24 Nov 10
U.S. Steel sets Newburgh-Beacon Bridge contract. CW p3 Dec 8

North Carolina
Fall flooding ravages roads, bridges. p14 Dec 8

Ohio
Corroding bridges stall Cleveland's SOHIO project,**. p13 Jul 28

Oregon
Wash.-Ore. I-205 bridge will be longest segmented structure in North America.*. p16 Nov 17

Pacific Trust Territory
Deep, fast water spawns record concrete box girder span, drawing,**. p21 Jul 14

Pennsylvania
Precast segmental test span may solve bridge woes,**. p9 Jul 7
and RC p18 Oct 6
Pittsburgh bridge revamped with help of explosives firm. p17 Nov 17

Texas
Houston pipe trestle disguised as bicycle bridge,*. p11 Jul 28
Houston: Higher piers clear sunken I-10 bridges for completion. p17 Aug 4
PIC bridge deck protection project largest to date,**. p43 Sep 8

Virginia
Second Norfolk bridge-tunnel. B p21 Jul 21
Chesapeake Bay Bridge-Tunnel: three major toll routes remain in default, map,**. p20 Oct 13

Washington
N. America's record precast cable-stayed Pasco-Kennewick Bridge spans Columbia R.,**. p27 Aug 18
Traveling formwork makes U.S. debut at Denny Creek Bridge,*. p40 Sep 22
Grand jury finds Seattle eng guilty in bridge testimony. p13 Oct 20
Wash.-Ore. I-205 bridge will be longest segmented structure in North America,*. p16 Nov 17
Former Seattle city eng sentenced for perjury. CW p3 Nov 24
A second conviction on Seattle project never built. CW p3 Dec 8
Pasco-Kennewick cable-stayed bridge in starring role at Wash. State Symposium**. p50 Dec 22

West Virginia
Crack, weld problems shut Silver Bridge,*. p10 Sep 15
and RC p4 Dec 15
Winner takes bridge by 2% margin, unit prices. p55 Oct 13

Wisconsin
Rail cars bridge Wis. river for crane,*. p13 Aug 11
and e p72 Aug 25

• Foreign
Belgium: Europe's longest curved box girders hurdle obstacles in Brussels,**. Cover and p18 Oct 20
Brazil: epoxy asphalt cracks on box girder bridge. p15 July 28
Germany: scaffold collapses at bridge job. B p20 Nov 10
Germany: extruded span cuts Mainflingen Bridge costs in half,**. p38 Nov 17
Great Britain: Scotland's cable-stayed bridge is final link,*. p12 Jul 14
Great Britain: England's cable-stayed twin rail bridge is a first for Europe,*. p13 Aug 11
Great Britain: prototype beam lifting rig saves $90,000 at South Wales viaduct,**. p38 Sep 8
Great Britain: girders replace London's aging arch bridges,*. p17 Sep 15
Great Britain: lift-slab viaduct jacked up over a bog near Stafford, England, drawings,**. p60 Oct 6
Great Britain: London Tower Bridge vibrations. B p56 Dec 22
Hong Kong plans $4.2 billion transport scheme, map,*. p45 Nov 17
Japan: traveling form slashes casting cycle for hwy viaduct,*. p14 Sep 8
Saudi Arabia: easing Riyadh's traffic tie-ups. B p17 Dec 1
Turkey: Decaying pontoons may sink Istanbul's Galata Bridge,**. p18 Aug 4
Turkey: Bid date set for second Bosporus Strait bridge. p14 Oct 13
USSR: Pedestrian bridge collapses near Moscow. B p18 Sep 15

BUDGET, FEDERAL, see: CONGRESS; CONSTRUCTION BUSINESS, see also subject in question

BUDGET, STATE AND LOCAL, see: BONDS, BUDGETS, FINANCING

BUILDING CODES AND LAWS, INSPECTION see also: CITIES; ZONING; SPECIFICATIONS & STANDARDS
Calif. eases plastic pipe rules. p17 Jul 14
Calif. bldg energy code still not resolved. p14 Jul 21
House opens hearings on federal fire code. p16 Aug 4
Ky. club blaze report points to code violations. CW p3 Sep 22
Report links Ky. club fire, lack of code enforcement,*. p11 and e p64 Sep 29
Report alleges HUD housing fraud in razed Atlanta complex,*. p46 Oct 6
Watergate burglar gets Miami inspector's job. CW p3 Oct 20
Tough, new codes stimulate barrier-free bldg design,**. p46 Nov 17
PPI blasts plastic pipe ban in West Coast one-story bldgs. p15 Dec 1

BUILDING DESIGN & COMPONENTS
Hancock Tower AIA award a joke? RC p5 Jul 7
Mass.: Abt Associates' offices erected without framing,*. p15 Jul 14
Calif. bldg energy code still not resolved. p14 Jul 21
Boston's Hancock AIA award an insult. RC p4 Jul 28
and RC p9 Nov 24
Boston's Hancock Tower wins AISC beauty award. p17 Aug 4
San Fran's Yerba Buena Center to get clear-span hall, drawings. p11 Aug 11
Winning design for Abu Dhabi natl assembly hall too costly,*. p18 Aug 18
NYC Citicorp, Boston Hancock: dampers (TMDs) steady sway of skyscrapers in wind, drawing,**. p28 Aug 18
and RC p10 Nov 17
New Orleans Sheraton hotel will be La.'s tallest. CW p3 Sep 1
Cleveland's Ohio State Office tower will ride 20 ft above tracks,**. p14 Sep 1
Dallas Market Center expansion yields record trade complex. p48 Oct 6
Subterranean design for energy-efficient Sacramento State Office wins competition,*. p14 Oct 13
Cables, jets may still bldg sway. p21 Oct 13
Disability coordinator for PBS named. CW p3 Oct 20
Okla City's Biltmore Hotel tallest steel-frame bldg felled by explosives,*. p12 Oct 20
Calif.: precision space frame trains lasers on target for fusion power test (Shiva),**. p28 Oct 20
Tough, new codes stimulate barrier-free bldg design,**. p46 Nov 17
Houston's tallest tower, First Int'l Plaza, set to go,*. p13 Nov 24
HVAC ducts climb outside walls to shorten bldg at Salt Lake City VA hospital, drawings. p22 Dec 8
Cincinnati bank bldg floor slab design change saves $500,000,*. p45 Dec 22
Tent-like, precast pyramids linked to form ceiling for Chatham, England office bldg,**. p47 Dec 22
Japan: tapered tower may be limit of current slipforming art, drawing,**. p62 Dec 22

• Ceilings and Floors
Tent-like, precast pyramids linked to form ceiling for Chatham, England office bldg,**. p47 Dec 22

• Doors and Windows
Mich. thermal window standard. B p25 Aug 18

• Plumbing
Stacked bathrooms carry extra floors in Brooklyn hospital expansion, drawing,**. p25 Nov 3
Boulder, Colo. public restrooms costly. B p19 Dec 8

• Prefabs, Modules and Systems
Loma Linda VA hospital: experience counts. RC p5 Jul 28
Fluor standardized A-plant okayed. p15 Sep 8
N.Y. Nassau Community College systems-built megastructure cuts campus erection time,**. p22 Sep 29
Prefab brick panels double as formwork to slash costs at Dallas college,**. p28 Oct 13
R.I. nursing home steel frame goes up in 12 hours,**. p14 Oct 20
GAO accepts systems bldg concept, finds GSA tests disappointing. p15 Oct 27
Stacked bathrooms carry extra floors in Brooklyn hospital expansion, drawing,**. p25 Nov 3
Sprayed concrete system raises a house a day,**. p25 Nov 10

• Renovation
GSA to ask funding boost to rehab, reuse buildings. p15 Nov 10
England, Wales school rehab. B p19 Dec 8
NYC: $85-m Commodore Hotel rehab job ready to go. p46 Dec 22

• Sprinklers
Combined bar joist and sprinkler system, Hydra-Strut, cuts cost, drawings. p29 Aug 18
U.S. to put sprinklers in federal prisons. p13 Sep 8

• Triangular
Triangular towers give rise to top views,**. p58 Dec 22

BUILDINGS, see also: ACCIDENTS & FAILURES; CITIES; HOUSING; DEMOLITION
Role of tall bldgs studied at Paris conf. B p21 Jul 21
NIBS funded. B p21 Jul 21
Tex. overrules landmark law, three Dallas bldgs felled,*. p15 Sep 15
BRAB executive manager. B p18 Sep 15
Contractors report bldg parameter costs. p99 Sep 22
Tall bldgs mtg examines urban explosion, in Paris. p9 and e p72 Dec 1
Chute, slide speed escape from fires in high-rises. p17 Dec 8
Explosives may raze NYC abandoned bldgs. p17 Dec 8
Parameter costs reported for five bldgs. p90 Dec 22

• Air-supported
Geiger-Berger team makes fabric tension roofs take off, drawing,**. Cover and p28 Nov 10

• Apartments, Hotels, Restaurants
HUD money, demand improve apt. outlook. p21 Jul 21
Seattle Olympic hotel atop tower scratched. B p21 Jul 21
Shear walls, slipforming speed Dallas' Reunion project,**. Cover and p20 Jul 28
and RC p12 Oct 6
Anchorage office-hotel complex. B p17 Aug 11
Two killed as Brooklyn, N.Y. tenement collapses,**. p13 and e p98 Aug 18
Caesars' lease on Atlantic City boardwalk. p2 p25 Aug 18
Okla City: steel-frame Biltmore hotel to be blown up. CW p3 Aug 25
Brick-clad concrete proves troublesome at London apt bldg. p10 Aug 25
Denver: job super's lift speeds apt. work,*. p11 Aug 25
Phila's Bellevue Stratford Hotel to be revived. p15 Aug 25
New Orleans Sheraton hotel will be La.'s tallest. CW p3 Sep 1
NYC Modern Art museum would become apt. landlord. CW p3 Sep 8
Anchorage union dispute stalls hotel work. p15 Sep 15
San Fran Intl Hotel demolition stopped at gunpoint,*. p16 Sep 15
Swedes teach Russians All-Betong on-site casting at Leningrad's Hotel Pribaltiskaya,**. p63 Sep 22
Las Vegas Hilton expansion. B p16 Sep 29
Okla City's Biltmore Hotel tallest steel-frame bldg felled by explosives,*. p12 Oct 20
Crumbling Miami hotel faces razing. p12 Oct 20
Atlantic City rebuilds, bets on its future, map,**. p25 Oct 27
Playboy plans $50-m Atlantic City pleasure palace,*. p26 Oct 27
and RC p4 Dec 15
Hallmark plans Hyatt Regency for Kansas City. B p20 Nov 10
Sun showers for hotel guests. CW p3 Nov 17
Rio apt. bldg. shored against sinking into beach. p20 Nov 17
Minority hiring; 20% goal for Atlantic City casinos. p55 Dec 1
Holiday Inns chain plans 35,000 new rooms. p41 Dec 22
New life for NYC's long-delayed Parc Vendome, now Sheffield Tower,*. p43 Dec 22
NYC: $85-m Commodore Hotel rehab job ready to go. p46 Dec 22
Triangular hotels for Qatar, Seattle Sheraton,**. p58 Dec 22

• Culture, Entertainment, Monuments, Meetings, Sports see also: RECREATION
Mich. high court okays Detroit arena. B p17 Jul 7
War-weakened bldg restored as concert hall in Dusseldorf,*. p17 Jul 21
San Fran's Yerba Buena Center to get clear-span hall, drawings. p11 Aug 11
Redesigned roof turns stresses inside out at Bradford, England sports center,**. p18 Aug 25
Moscow Olympics building behind. p10 Sep 1
NYC Modern Art museum would become apt. landlord. CW p3 Sep 8
Ky. club blaze report points to code violations. CW p3 Sep 22
Report links Ky. club fire, lack of code enforcement,*. p11 and e p64 Sep 29
Ohio's Kent State U. builds gym. B p16 Sep 29
Dallas sports arena in Reunion complex. B p16 Sep 29
Corroded rebars collapse Tex. high school stadium stand,**. p42 Oct 6
Basketball spurs San Antonio sports arena to new roof height,**. p55 Oct 6
Pa. State U. stadium expansion boosts stands and fans 12.5 ft, drawing,*. p58 Oct 6
N. J. Meadowlands stadium complex to get arena. CW p3 Oct 20
Two referendums, one recount ensure Worcester civic center/sports arena start. p15 Oct 20
Deluge doesn't stop N.J. Meadowlands sports arena. p17 Nov 17
Montreal Olympic Stadium roof. B p17 Nov 24
Pyramids, parabolas, cables form Saudi velodrome roof, drawing,*. p20 Nov 24
Wraparound roof straddles West Berlin's Congress Center to quiet din, drawings,**. p26 Nov 24
El Paso performing arts center suit increased to $10-m by contractor. p13 Dec 1
San Fran's Yerba Buena center stalled again. B p17 Dec 1
Push set for D.C. building arts museum,**. p14 Dec 15
and e p188 Dec 22

• Federal, Municipal, State
Moscow-Paris, Moscow-Washington embassy swaps delayed. p13 Jul 7
Builder squeezes Minn. jail against cliff,**. p14 Jul 7
GSA decides to keep bid listing requirement for two months. WO p7 Jul 14
Calif. capitol restructured for quake survival,**. Cover and p18 Jul 14
White House solar options considered in ERDA study. p17 Jul 21
Loma Linda VA hospital: experience counts. RC p5 Jul 28
Mass.: Middlesex courthouse $16-m price tag tripled,*. p25 Aug 11
Federal construc agencies may be combined (GSA, Corps). WO p7 Aug 18
Lake Placid: Olympic housing to become prison. p18 Aug 18
Winning design for Abu Dhabi natl assembly hall too costly,*. p18 Aug 18
Study of combustibles in prisons. B p25 Aug 18
Cleveland's Ohio State Office tower will ride 20 ft above tracks,**. p14 Sep 1

U.S. to put sprinklers in federal prisons. p13 ... Sep 8
U.S. sues over Phila's sinking courthouse/office bldg,*. p11 ... Sep 15
Lessons from sinking Calif. courthouse. RC p11 ... Sep 22
and RC p9 ... Nov 24
Planners would transform Capitol Hill with new design. p11 ... Sep 29
House hearing on A-E selection no threat to Brooks Law,*. p50 ... Sep 29
Capitol West Front: repair, don't extend. RC p26 ... Oct 6
GSA's faulty foundations a problem; list of bldgs,**. p37 ... Oct 6
and RC p10 ... Nov 17
and RC p4 ... Dec 1
and RC p4 ... Dec 8
Solar retrofits for Calif. state bldgs. B p50 ... Oct 6
Subterranean design for energy-efficient Sacramento State Office wins competition,*. p14 ... Oct 13
Disability coordinator for PBS named. CW p3 ... Oct 20
Two referendums, one recount ensure Worcester civic center/sports arena start. p15 ... Oct 20
Foundation woes a chronic GSA problem,*. p10 and e p80 ... Oct 27
GAO accepts systems bldg concept, finds GSA tests disappointing. p15 ... Oct 27
GSA to ask funding boost to rehab, reuse buildings. p15 ... Nov 10
Tough, new codes stimulate barrier-free bldg design,**. p46 ... Nov 17
San Fran U.S. postal center. B p17 ... Nov 24
GSA committee favors bid-listing rule. p53 ... Dec 1
HVAC ducts climb outside walls to shorten bldg at Salt Lake City VA hospital, drawings. p22 ... Dec 8
Architect heads GSA's PBS. p43 ... Dec 22

• Garages, Service Stations
Portable prestressing bed produces columns, beams for Boise garage,**. p18 ... Nov 24

• Homes
TVA cuts heating costs 33% in pilot insulation program. p13 ... Aug 11
Canada re-insulating homes. B p17 ... Aug 11
Chicago's oldest house jumps elevated transit tracks,**. p10 ... Dec 15

• Hospitals
Loma Linda VA hospital: experience counts. RC p5 ... Jul 28
Three men killed when scaffold falls 13 stories at Boston hospital job. p45 ... Sep 22
R.I. nursing home steel frame goes up in 12 hours,**. p14 ... Oct 20
Stacked bathrooms carry extra floors in Brooklyn hospital expansion, drawing,**. p25 ... Nov 3
HVAC ducts climb outside walls to shorten bldg at Salt Lake City VA hospital, drawings. p22 ... Dec 8
Va. architect guarantees hospital project cost in writing,*. p40 GO ... Dec 8

• Industrial Plants
$1-billion refinery at Valdez. B p17 ... Jul 14
Fla. project agreement puts lid on chemical complex wage increases. CW p3 ... Jul 28
Floating gas plants feasible, Dusseldorf conf. told. CW p3 ... Sep 1
Jap. satellite transmission cuts construc time for Tehran petrochemical complex. p12 ... Sep 15
Solar energy tapped to dry beans, in Ala.,*. p17 ... Oct 13
and RC p6 ... Dec 15
Egyptian venture may ease Arab boycott of Ford. CW p3 ... Nov 3
Stage set for billion-dollar Alaska refinery. p11 ... Nov 3
Floating plant to set sail for Brazil,*. p22 ... Nov 17
Jacobs contract for Jordan potash complex. B p29 ... Nov 17
Japan develops floating pile plant for Mideast construc,*. p14 ... Dec 1
Tricky forming for GM's Mich. concrete wind tunnel, drawing,*. p12 ... Dec 8
Solar furnace planned for Chilean desert. p15 ... Dec 8

• Laboratories, Libraries, Communications, Research
JFK library contract for U. of Mass. B p25 ... Aug 18

• Offices

New York's World Trade Center—see: CITIES, New York
Hancock Tower AIA award a joke? RC p5 ... Jul 7
Office building gains spotty. p13 ... Jul 14
Mass.: Abt Associates' offices erected without framing,*. p15 ... Jul 14
Office bldg. collapse in Brazil is fatal to 19. p15 ... Jul 14
Honolulu hexagon. B p17 ... Jul 14
Window-watching again in Boston's Hancock Tower. CW p3 ... Jul 21
Boston's Hancock AIA award an insult. RC p4 ... Jul 28
and RC p9 ... Nov 24
Corroding bridges stall Cleveland's SOHIO project,**. p13 ... Jul 28
Boston Hancock windows will get 18-hour watch,*. p15 ... Jul 28
Collapse of Athens office bldg probed. p15 ... Jul 28
Boston's Hancock Tower wins AISC beauty award. p17 ... Aug 4
Boston's Hancock loses 23rd new window. CW p3 ... Aug 11
Anchorage office-hotel complex. B p17 ... Aug 11
Newark: PSE & G HQ's heat will be 96% recovered energy. p14 ... Aug 18
NYC Citicorp, Boston Hancock: dampers (TMDs) steady sway of skyscrapers in wind, drawing,**. p28 ... Aug 18
and RC p10 ... Nov 17
Boston: another Hancock pane pops. p15 ... Sep 1
Salvaged Hancock windows are cracking up in Me. p15 ... Sep 15
*National City Center, Cleveland. p58 ... Sep 22
Energy quest spurs Denver building boom,**. p64 ... Sep 22
Fluor builds a Saudi Hq,*. p13 ... Sep 29
D.C.'s Natl Press Club bldg to be replaced by $100-m complex. B p16 ... Sep 29
Roots of Sydney M.L.C. Centre forming innovation. RCs p28 ... Oct 6
1974 Miami office collapse damages ring up millions. p44 ... Oct 6
All-electric combination cuts Ohio Goodrich facility energy costs. p17 ... Oct 13
Cables, jets may still bldg sway. p21 ... Oct 13
S.C.: pre-demolition office bldg collapse kills five. p12 ... Oct 20
New owners to repair landmark Chrysler Bldg,**. p18 ... Nov 17
Houston's tallest tower, First Int'l Plaza, set to go,*. p13 ... Nov 24
Construc 'swinging' at American Stock Exchange,**. p12 ... Dec 1
Demolition contractors fined for S.C. office bldg's early collapse. p13 ... Dec 1
Bell retrofits for energy savings,*. p13 ... Dec 8
Reinstatement of tax breaks could spark Boston bldg boomlet. p19 ... Dec 8
AT&T announces record construc plans. CW p3 ... Dec 15
Solar plans still alive at Citicorp. p17 ... Dec 15
Tandy Center's twin towers mark rebirth of Fort Worth,**. p22 ... Dec 15
Cincinnati bank bldg floor slab design change saves $500,000,*. p45 ... Dec 22
First Nat'l Bank Bldg, St. Louis,*. p46 ... Dec 22
Tent-like, precast pyramids linked to form ceiling for Chatham, England office bldg,**. p47 ... Dec 22
Triangular tower for Cincinnati,*. p58 ... Dec 22

• Schools
JFK library contract for U. of Mass. B p25 ... Aug 18
Problem asbestos at N.J. schools gets sealant coat,*. p11 ... Sep 1
Ohio's Kent State U. builds gym. B p16 ... Sep 29
N.Y. Nassau Community College systems-built megastructure cuts campus erection time,**. p22 ... Sep 29
Corroded rebars collapse Tex. high school stadium stand,**. p42 ... Oct 6
Pa. State U. stadium expansion boosts stands and fans 12.5 ft, drawing,*. p58 ... Oct 6
Prefab brick panels double as formwork to slash costs at Dallas college,**. p28 ... Oct 13
Court upholds CM extortion convictions of two former Mass. state senators. p11 ... Dec 1
England, Wales school rehab. B p19 ... Dec 8
Alaska: faulty estimate calls for another bond referendum. p43 ... Dec 22

• Shops, Shopping Centers
Future unsure for San Fran's City of Paris landmark. CW p3 ... Aug 4
Shopping center construc blooms in sun belt. p9 ... Aug 25

• Storage, Silos, Warehouses, Tanks
FEA salt dome oil storage plans accelerating. CW p3 ... Aug 11
and RCs p11 ... Sep 22
and RC p5 ... Oct 13
and RC p30 ... Dec 22
Rock Store '77, Stockholm meeting, told underground storage saves energy. p16 ... Sep 29
and e p80 ... Oct 13
Designers race against time to get oil into salt domes,**. p16 ... Oct 13
All-electric combination cuts Ohio Goodrich facility energy costs. p17 ... Oct 13
Japan: Steel pendulum may be quake protection,*. p15 ... Oct 27

• Terminals
Germans rush Moscow airport terminal job,*. p13 ... Nov 3
Glass, concrete triangles, roof Riyadh airport terminals,**. p15 ... Nov 17
NYC's La Guardia lands new terminal. CW p3 ... Dec 1
Dulles airport terminal expansion set to take off. p15 ... Dec 8
Supreme Court to rule on NYC Grand Central Terminal landmark status. p14 ... Dec 15

• Towers, Stacks, Chimneys
Ring girder holds Dallas' Reunion tower slipform. p21 ... Jul 28
Eiffel Tower still sound. B p17 ... Aug 11
Key N.Y. cooling tower battle brewing. p12 ... Aug 18
Large wind turbine solar energy plants proposed,*. p14 ... Dec 8
Japan: tapered tower may be limit of current slipforming art, drawing,**. p62 ... Dec 22

BUREAU OF PUBLIC ROADS, see: HIGHWAYS

BUREAU OF RECLAMATION, see: SOIL; WATER RESOURCES

C

CABLES, WIRE
Canada: Plow buries record submarine cable run,*. p15 ... Aug 4
Cables to carry Mississippi R. Bridge twin steel box girder superstructure,*. p23 ... Aug 11
Use of helicopter, jacking frame speeds Calif. drawbridge repair,*. p16 ... Aug 18
Japan: toy plane eases tough cable spanning job,*. p16 ... Sep 8
and RC p16 ... Oct 6
CPSC safety suit questions old aluminum wiring. p9 ... Nov 3
NRC checks faulty Mich. A-plant safety wiring. p13 ... Nov 24
Jap. utility cools underground cable with water instead of oil. p17 ... Dec 1

CAISSONS, COFFERDAMS, see: BRIDGES; DAMS; SOIL

CANALS, CHANNELS
Kissimmee R. controversy. RCs p18 ... Oct 6
House, Senate to battle over user tax for waterways,*. p10 ... Oct 20
La.'s Red R. waterway gets under way. p11 ... Dec 15

• Foreign
W. German Europa Canal project jeopardized, map. p15 ... Nov 24
Panama: chances for new Panama Canal still appear dim. WO p7 ... Aug 4
Panama plans huge expansion if treaties are ratified. WO p7 ... Sep 15
and RC p10 ... Nov 17
Panama Canal, lock expansion permitted under treaty. p21 ... Oct 13
Panama engineering lessons. RC p5 ... Oct 20

CAPITAL SPENDING, see: ECONOMY

CAUSEWAYS, see: BRIDGES

CITIES, see also: BUILDING CODES; HOUSING; ZONING; PLANNING
HUD funds to halt if cities don't help poor. p12 ... Jul 7
Carter seeks financially painless urban enrichment aids. p13 and e p98 ... Sep 8
Small towns challenge EDA public works grants. CW p3 ... Sep 15
Tax abatement programs used in 28 states to spur economy,*. p58 and e p206 ... Sep 22
$12.4-billion housing bill favors old, ailing cities. p38 ... Oct 6
Optional plans for financing urban redevelopment considered. WO p7 ... Oct 27
HUD squeezing Fannie Mae for more inner-city financing. p11 and e p72 ... Nov 3
HUD community development block grant rules draw fire,*. p15 ... Nov 10
and e p112 ... Nov 17
Urban wish list totals billions. p20 ... Nov 17
Bank board proposes S&Ls lend more in core of cities. p24 ... Nov 17
Cities will be penalized for low-income housing failures. WO p7 ... Dec 1

• New Towns
USSR's Sayan dam site nucleus of new town,**. p22 ... Jul 21
White House halts regional commissions, new towns programs,**. p38 ... Sep 22
$500-m new town within Riyadh. CW p3 ... Sep 29
Starrett tops out Iranian high-rises in Farahzad new town,*. p17 ... Oct 27
U.S. takes its seventh new-town bath. p17 ... Nov 10
Egypt desert new towns rejected by funding agencies. p20 ... Nov 17
Gulf Oil will sell its equity in new town of Reston, Va. p15 ... Dec 1

• By Name

Atlanta, Ga.
MARTA subcontractor jailed. B p17 ... Jul 14
MARTA, UMTA fight over rail line extension. p11 ... Jul 28
MARTA minority subs seek quicker pay. p16 ... Sep 8
MARTA overrun estimate drops $10-m. CW p3 ... Sep 29
MARTA's construc director resigns. CW p3 ... Oct 13
MARTA rail bridge bypasses roadblock,*. p15 ... Nov 3
Airport, MARTA drawings just don't add up. p24 ... Nov 17
Bid $1-m under estimate helps MARTA budget aim. p15 ... Dec 1
MARTA's report urges extensions to north, south. p41 ... Dec 22

Atlantic City, N.J.
City rebuilds, bets on its future, map,**. p25 ... Oct 27
and RC p6 ... Dec 15

Beirut, Lebanon
Beirut seeks $ billions in outside aid for reconstruc,**. p33 ... Aug 4
Berlin helps to plan reconstruc. B p18 ... Sep 15
Rebuilding to mix old, new,*. p18 ... Nov 10

Berlin, Germany
Helps to plan Beirut reconstruc. B p18 ... Sep 15

Birmingham, England
Energy, housing rehab big at British show, Interbuild. p14 ... Nov 24

Boston, Mass.
Mayor White's "Boston plan" for redevelopment. WO p7 ... Oct 27

Dallas, Tex.
Shear walls, slipforming speed Dallas' Reunion project,**. Cover and p20 ... Jul 28
and RC p12 ... Oct 6
Proposed tax incentives brighten Dallas solar trade show. p14 ... Sep 8
Dallas Market Center expansion yields record trade complex. p48 ... Oct 6
Campbell Centre open shop "gamble" pays off for developer,**. p20 ... Oct 27

Denver, Colo.
Energy quest spurs Denver building boom,**. p64 ... Sep 22
Moves to increase minority firm participation. p91 ... Nov 17

Detroit, Mich.
Splashy fountain bejewels civic center plaza,**. p64 ... Oct 6

El Paso, Tex.
Performing arts center suit increased to $10-m by contractor. p13 ... Dec 1

Farahzad, Iran
Starrett tops out high-rises,*. p17 ... Oct 27

Fort Worth, Tex.
Tandy Center's twin towers mark rebirth of Fort Worth,**. p22 ... Dec 15

Honolulu, Hawaii
Downtown Grosvenor Center hexagonal towers. B p17 ... Jul 14

Jerusalem, Israel
Old City renewal complex designed by Safdie, Weil,*. p19 ... Sep 15

Lake Placid, N.Y.
Govt eyes 1980 Olympics CM bill. p14 ... Jul 14
Olympic housing to become prison. p18 ... Aug 18

Las Vegas, Nev.
USGS: sinking is no emergency. p17 ... Dec 1

Leningrad, USSR
Flood barrier will protect Leningrad from sea storms. p13 ... Dec 15

Los Angeles, Calif.
Ordered to comply with ocean sludge disposal schedule. p20 ... Aug 18
EPA sues L.A. over Hyperion plant modification delay. CW p3 ... Aug 25
Challenges tax-increment financing of urban redevelopment projects. p19 ... Sep 15

Managua, Nicaragua
Managua quake recovery,*. RC p5 ... Oct 6

Memphis, Tenn.
EPA exacts stiff agreement, record pollution fine. p11 ... Dec 8

Montreal, Canada
Olympic Stadium roof. B p17 ... Nov 24

Moscow, USSR
U.S. to host fire safety sales group. CW p3 ... Aug 4
Moscow Olympics building behind. p10 ... Sep 1

Nagoya, Japan
Central Park shops and trains share sub-grade site,*. p15 ... Jul 7

New York, N.Y.
SEC blast may dislodge truth bill. p15 ... Sep 8
Banks polish Big Apple with industrial loans. p14 ... Oct 20
Bonding tied to minority mandate. p9 ... Nov 3

Paris, France
Tall buildings meeting examines urban explosion. p9 and e p72 ... Dec 1
Huge Les Halles station ties together Paris transit, drawing, map,**. Cover and p18 ... Dec 15

Philadelphia, Pa.
Houston developer eyes Penn's Landing project. CW p3 ... Nov 3

Reston, Va.
Gulf Oil will sell its equity in new town. p15 ... Dec 1

Riverton, N.Y.
U.S. takes its seventh new-town bath. p17 ... Nov 10

St. Louis, Mo.
Building boom continues,*. p46 ... Dec 22

San Francisco, Calif.
BART wins $15-m cash settlement. p14 and e p72 ... Jul 28
and RC p28 ... Sep 22
and RC p5 ... Oct 13
Beach, Great Hwy, sewer plan rolled into one, drawing. p44 ... Oct 6
BART scores low in report card. p14 and e p72. Nov 3

Seattle, Wash.
Downtown Westlake Mall. B p17 ... Jul 7

Washington, D.C.
$100-m office/hotel complex to replace Natl Press Club. B p16 ... Sep 29
Pa. Ave. development plans gain speed after years of delay. p16 ... Oct 20
Georgetown cleared for high-rise development. p24 ... Nov 17

Willow, Alaska
Alaska picks master plan for new capital, map,*. p12 ... Dec 15

CIVIL RIGHTS, see: ETHICS

COAL, see also: POWER; SOIL
Transp inadequacies hamper coal production increases. WO p7 ... Jul 7
Coal section of energy package jeopardized too. WO p7 ... Jul 7
Caterpillar gets coal gasification plant. B p17 ... Jul 14
Coal burning threatens climatic stability. p18 ... Aug 4
Australian oil crunch fuels alternative energy hunt,**. p32 ... Aug 4
Coal slurry churns up lawsuits. CW p3 ... Aug 18
ERDA selects Curtiss-Wright for synfuel turbine. B p25 ... Aug 18
Tex. coal-gas-to-hydrogen plant. B p25 ... Aug 18
A win for coal slurry. CW p3 ... Aug 25
TVA proposes $1-billion energy package. p20 ... Sep 8
GAO blasts Coalcon, coal gasification project. p13 ... Sep 15
Carter's coal plan faces mounting doubts in Congress. WO p7 ... Sep 29
Chicago's Commonwealth Edison slates four coal-fired powerplants. p16 ... Sep 29
Coal slurry bill flowing. CW p3 ... Oct 6
Gearing up for coal would cost Britain and W. Germany billions. CW p3 ... Dec 1

COATINGS, see: ADHESIVES, COATINGS

COLLAPSES
Office bldg. collapse in Brazil fatal to 19. p15 ... Jul 14
Collapse of Athens office bldg. probed. p15 ... Jul 28
Two killed as Brooklyn, N.Y. tenement collapses,**. p13 and e p98 ... Aug 18
Collapsed N.J. span raised for reuse,*. p10 ... Aug 25
1974 Miami office collapse damages ring up millions. p44 ... Oct 6
S.C.: pre-demolition office bldg collapse kills five. p12 ... Oct 20
Truck's load drops Ala. bridge span. CW p3 ... Oct 27
Dam collapses in Southeast spur federal inspection plan, map,**. p13 ... Nov 10
Scaffold collapses at German bridge job. B p20 ... Nov 10
Demolition contractors fined for S.C. office bldg's early collapse. p13 ... Dec 1

COLUMNS, see: BEAMS & COLUMNS; CONCRETE; STEEL

COMMUNICATIONS, ELECTRONICS, AUTOMATION

• Automation, Computers, Electronic Devices
Special Report: small computers, table, glossary,**. Cover, p20 and e p80 ... Aug 4
Computer keeps an eye on Calif. freeway travelers, map,*. p18 ... Dec 8
Satellite spots water pollution where sampling methods fail. p11 ... Dec 15
Computerized probe predicts soil behavior during quakes. p13 ... Dec 15

• Radar, Radio, TV
Project Seafarer gets clean bill of health. CW p3 ... Aug 11
Jap. satellite transmission cuts construc time for Tehran petrochemical complex. p12 ... Sep 15
Computer keeps an eye on Calif. freeway travelers, map,*. p18 ... Dec 8
Navy files statement on Project Seafarer. p41 ... Dec 22
Japan: tapered tower may be limit of current slipforming art, drawing,**. p62 ... Dec 22

COMPUTERS, see: COMMUNICATIONS, ELECTRONICS

CONCRETE, see also: PAVING
Concrete strength evaluation speeded by chemical process, (Kelly-Vail test). p16 ... Aug 4
Brick-clad concrete proves troublesome at London apt bldg. p10 ... Aug 25
Asphalt-cement mix, cold ascon, forms cutoff walls and membranes. p17 ... Sep 15
Swedes teach Russians All-Betong on-site casting at Leningrad's Hotel Pribaltiskaya,**. p63 ... Sep 22
Crumbling Miami hotel faces razing. p12 ... Oct 20
Pa. researchers claim oil, spirits bath prolongs concrete bridge deck life. p15 ... Nov 10
Japan: Steel fiber, shotcrete mix works. p16 ... Nov 10
Sprayed concrete system raises a house a day,**. p25 ... Nov 10
Glass, concrete triangles, roof Riyadh airport terminals,**. p15 ... Nov 17
Wash.-Ore. I-205 bridge will be longest segmented structure in North America,*. p16 ... Nov 17
CERL's Kelly-Vail rapid concrete test,*. p20 ... Dec 1

• Forms & Falsework
Shear walls, slipforming speed Dallas' Reunion project,**. Cover and p20 ... Jul 28
and RC p12 ... Oct 6
Ring girder holds Dallas' Reunion tower slipform. p21 ... Jul 28
Traveling form slashes casting cycle for Jap. hwy viaduct,*. p14 ... Sep 8
Traveling formwork makes U.S. debut on Wash. bridge job,*. p40 ... Sep 22
Hydraulic forms speed Calif.'s Antioch Bridge job,**. p54 ... Sep 22
Roots of Sydney M.L.C. Centre forming innovation. RCs p28 ... Oct 6
San Fran: traveling forms roll over streetcar tracks to cast station in hill, drawings,**. p22 ... Oct 13
Prefab brick panels double as formwork to slash costs at Dallas College,**. p28 ... Oct 13
Scaffold collapses at German bridge job. B p20 ... Nov 10
Sprayed concrete system raises a house a day,**. p25 ... Nov 10
Calif.: aluminum forms, inflatable-tube forming system, speed big diameter storm drain,**. p26 ... Nov 10
Tricky forming for GM's Mich. concrete wind tunnel, drawing,*. p12 ... Dec 8
Cincinnati bank bldg floor slab design change saves $500,000,*. p45 ... Dec 22
Japan: tapered tower may be limit of current slipforming art, drawing,**. p62 ... Dec 22

• Lift Slab and Jackblock
Lift-slab viaduct is jacked up over a bog near Stafford, England, drawings,**. p60 ... Oct 6

• Precast, Prestressed
Precast segmental test span may solve bridge woes (Pa.),**. p9 ... Jul 7
and RC p18 ... Oct 6
N. America's record precast cable-stayed bridge spans Columbia R.,**. p27 ... Aug 18
Scotland's floating prestressed breakwater zigzags to beat waves,**. p12 ... Sep 29
Precast concrete girders chosen for Miami's elevated. p13 ... Sep 29
Corroded rebars collapse Tex. high school stadium stand,**. p42 ... Oct 6
South African precaster vies for Northeast rail corridor minority contract. p13 ... Nov 3
Portable prestressing bed produces columns, beams for Boise garage,**. p18 ... Nov 24
Tent-like, precast pyramids linked to form ceiling for Chatham, England office bldg,**. p47 ... Dec 22

• Reinforced
Chloride attack forces Calif. bridge column replacement,**. p20 ... Sep 29

CONGRESS; FEDERAL ISSUES; see also subject discussed
Carter prunes bureaucracy, asks economic development efforts study. p13 ... Jul 7
Construc issues that still confront Congress. WO p7 ... Aug 11
Senate plans probe on federal use of expert consultants. WO p7 ... Aug 18
Federal construc agencies may be combined (GSA, Corps). WO p7 ... Aug 18
Lobbying crack-down may inadvertently include consultants. WO p7 ... Sep 22
Commerce again promises construc listening post. WO p7 ... Nov 3
Congress may find that truth hurts. p15 ... Dec 8
New technology office head. B p19 ... Dec 8
Zero based budgeting gets workout by Corps. p11 ... Dec 15
Business will get early warning on regs from agencies. WO p7 ... Dec 22
Simplifying the law. RC p14 ... Dec 22
Congress faces key construc issues in '78,**. p38 ... Dec 22

CONSERVATION, see: PLANNING AND ENVIRONMENT

CONSTRUCTION BUSINESS, see also: ECONOMY
GAO studying tax impact on Americans overseas. CW p3 ... Jul 7
Carter prunes bureaucracy, asks economic development efforts study. p13 ... Jul 7
U.S. encouraging World Bank, OPIC investment in developing countries. WO p7 ... Jul 14
Admin. assembling tax reform package. WO p7 ... Jul 21
Antiboycott rebuttals. RCs p9 ... Jul 21
Top contractors talk terms with Arabs in Geneva,**. p20 and e p82 ... Jul 21
and RC p5 ... Sep 15
Bureaucratic mistake may mean $150-m more for public works. WO p7 ... Jul 28
Conferees dump nine water projects,**. p8 ... Jul 28
and RC p10 ... Nov 17
Public works Round II on schedule, table. p14 ... Aug 4
American-led team wins work on Saudi army city. p19 ... Aug 4
Foreign business conditions detailed in revised Commerce handbook. p19 ... Aug 4
Construc issues that still confront Congress. WO p7 ... Aug 11
OPIC draws new criticism in Congress. WO p7 ... Aug 11
Antiboycott law merits support. RC p5 ... Aug 18
Carter continues fight against water projects on hit list. WO p7 ... Aug 18
N.H. budget veto bars starts on new state public works. p25 ... Aug 18
Ease up on Americans abroad. e p98 ... Aug 18
U.S. firms unveil foreign capital spending plans. p10 ... Sep 1
New antiboycott tax rules issued. p15 ... Sep 1
Small towns challenge EDA public works grants. CW p3 ... Sep 15
D.C. insists on residents for public works projects. p16 ... Sep 15
AGC may sue on public works minority issue. CW p3 ... Sep 22
GAO says overseas tax change would aid trade balance. WO p7 ... Sep 29
Minority contracting: AGC set to challenge public works law. p8 and e p64 ... Sep 29
and RC p11 ... Oct 6
and RCs p9 ... Nov 17
and RC p4 ... Dec 8
Arab boycott rules are open for comment. p10 ... Sep 29
Pa. contractors file public works minority suit. p51 ... Sep 29
Tax breaks for work abroad may continue. WO p7 ... Oct 6
Chicago committee backs public works setasides. p43 ... Oct 6
Giffels seek $10-billion Indonesian plan. CW p3 ... Oct 13
NCA trade mission to check Venezuelan market. p58 ... Oct 13
Controversial tax changes may be postponed. CW p3 ... Nov 3
Egyptian venture may ease Arab boycott of Ford. CW p3 ... Nov 3
NYC bonding tied to minority mandate. p9 ... Nov 3
Congress set to extend overseas investment insurance program (OPIC). WO p7 ... Nov 10
AGC continues legal onslaught against minority set-asides,*. p11 ... Nov 10
Congress nears completion of overseas bribery bill. p17 ... Nov 10
ENR conf: claims abroad present extra risk. p16 ... Nov 17

U.S. millions make Egypt bright market for A-Es, map. p37 ... Nov 17
AGC scores points, but no win, in Mont. p89 ... Nov 17
NUCA issues own minority set-aside policy. p89 ... Nov 17
and p10 ... Nov 24
Venezuela: A big construc market,*. p90 ... Nov 17
EDA says grantees may do in-house design. p91 ... Nov 17
Boycott law helps business. RC p9 ... Nov 24
NCIC takes position opposing minorities program. p10 ... Nov 24
Minority contracting: where it all stands. e p80 ... Nov 24
and e p80 ... Dec 8
British construc faces nationalization threat. p54 ... Dec 1
NCIC, Commerce meet on minority contracting issue. WO p7 ... Dec 8
Minority contractors protest AGC suits,**. p57 ... Dec 8
AFL-CIO calls for more public works programs. CW p3 ... Dec 15
Carter aides hassle over water project controversy. WO p7 ... Dec 15
Carter gets bill banning foreign bribery,*. p17 ... Dec 15
Vt. contractor gets relief from set-aside requirement. CW p3 ... Dec 22
Minority set-asides. RCs p17 ... Dec 22
U.S. tax rules questioned. RC p28 ... Dec 22

• Advanced Planning
Manufacturing leads July plans, table. p57 ... Aug 4
Apts., utilities lead August planning gain, table. p56 ... Sep 1
Utilities counter new plans decline, table. p136 ... Oct 6
Heavy construc leads October planning volume, table. p53 ... Nov 3
Transp tops Nov planning, table. p54 ... Dec 1

• Costs
Third quarterly cost issue. pp67-132 ... Sep 22
Rising costs loom for construc. p67 ... Sep 22
Building cost and price index roundup. p67 ... Sep 22
Construc wage hikes slacken. p73 ... Sep 22
The Four M's:
Manpower:
ENR construc wage indexes. p73 ... Sep 22
Hourly wage scales in construc, August 1, 1977. p74 ... Sep 22
Wage rates in other cities as of July 1, 1977, BLS. p80 ... Sep 22
Compensation insurance base rates, July 1, 1977. p82 ... Sep 22
Materials:
ENR matls price indexes for 20 cities. p90 ... Sep 22
Construc matls price indexes, BLS. p94 ... Sep 22
Machinery:
List price indexes, BLS. p104 ... Sep 22
Money:
Inflation worries presage higher borrowing costs. p107 ... Sep 22
Contractors reap rewards from steel industry problems,*. p87 ... Sep 22
Utility costs continue to rise, Handy-Whitman indexes. p97 ... Sep 22
Contractors report bldg parameter costs. p99 ... Sep 22
Economic problems still plague foreign construc. p110 ... Sep 22
More work, fewer bidders hike hwy costs. p125 ... Sep 22
Bid price trends on federal-aid hwy contracts, FHWA. p125 ... Sep 22
Hwy bid price indexes for 20 states. p125 ... Sep 22
Irrigation, hydro costs rising faster. p126 ... Sep 22
Irrigation and hydro cost indexes for the West, BuRec. p126 ... Sep 22
EPA indexes show shrinking cost hikes. p129 ... Sep 22
ASCE study claims social environmental rules lift construc costs. p14 ... Oct 27
Fourth quarterly cost issue. pp67-110 ... Dec 22
Materials and money edge costs higher. p67 and e p188 ... Dec 22
Building cost and price index roundup. p70 ... Dec 22
Estimators count on controllable costs. p70 ... Dec 22
The Four M's:
Materials:
Price increases to slacken. p72 ... Dec 22
Matls price roundup, Nov. 18, 1977. p74 ... Dec 22
Matls price indexes, BLS. p79 ... Dec 22
Shortages inflate costs, lengthen construc time. p81 ... Dec 22
Manpower:
Job needs keep lid on pay demands. p82 ... Dec 22
ENR wage indexes: average gains 5.9%. p82 ... Dec 22
Money:
Economic uncertainties leave money outlook in limbo. p84 ... Dec 22
Machinery:
Prices show moderate gains as orders soar. p88 ... Dec 22
Construc equip rental rates, Nov. 11, 1977. p88 ... Dec 22
Equip price indexes BLS. p89 ... Dec 22
Parameter costs reported for five bldgs. p90 ... Dec 22
Heavy construc cost indexes:
Highway. p97 ... Dec 22
Irrigation and hydro for the West. p101 ... Dec 22
Sewerage. p102 ... Dec 22
Excavation, surfacing hike road costs. p97 ... Dec 22
Cost pressures ease for water jobs. p101 ... Dec 22
Sewerage costs rising at faster pace. p102 ... Dec 22
Instability shakes worldwide recovery. p104 ... Dec 22

• Financing, see BONDS

• Forecast
Construc shifts to lower gear, chart, tables. p8 ... Oct 20
McG-H forecast sees hot market in bldgs. p12 ... Nov 3

• Foreign, see: INTERNATIONAL

• Materials and Labor Prices
Cement, aggregate, ready mixed concrete, asphalt.
p44 Jul 7/p50 Aug 4/p64 Sep 8/p122 Oct 6
p38 Nov 10/p38 Dec 8
Iron and steel products, pipe.
p50 Jul 14/p28 Aug 11/p36 Sep 15/p50 Oct 13
p66 Nov 17/p32 Dec 15
Wood products, glass, explosives, chemicals.
p54 Jul 21/p62 Aug 18/p90 Sep 22/p62 Oct 20
p40 Nov 24/p72 Dec 22
Wage rates, building board, lath, insulation.
p38 Jul 28/p30 Sep 1/p34 Sep 29/p34 Nov 3
p34 Dec 1
Clay products, lime, plaster, paint, roofing.
p38 Jul 28/p42 Aug 25/p34 Sep 29/p36 Oct 27
p34 Dec 1

• Scoreboard
Wage rates, materials prices, ENR index review.
p38 Jul 7/p43 Aug 4/p58 Sep 8/p113 Oct 6
p37 Nov 10/p32 Dec 8
ENR cost indexes in 22 cities; ENR wage, materials and cost indexes in 20 cities.
p40 Jul 14/p27 Aug 11/p35 Sep 15/p34 Oct 13
p59 Nov 17/p30 Dec 15
Backlog; new plans for industrial plants and contract awards.
p39 Jul 21/p57 Aug 18/p191 Sep 22
p51 Oct 20/p35 Nov 24/p173 Dec 22
New orders and bidding volume indexes, bond sales and contractor failures.
p28 Jul 28/p34 Aug 25/p31 Sep 29/p34 Oct 27
p25 Dec 1
ENR bidding volume index charts.
p26 Sep 1/p27 Nov 3

• Unit Prices
Ga. paving job bid 14% below estimate. p47 ... Jul 7
Corporate partnership takes Calif. sewer job. p47 ... Jul 7
Eight of 13 bid below Tenn. road estimate. p52 ... Jul 14
Ohio sewer bid 6% under estimate. p52 ... Jul 14
Winner only one under Ga. bridge estimate. p64 ... Jul 21
Low bidder 30% below D.C. force main estimate. p64 ... Jul 21
Winner outbids 13 for Ala. bridge job. p56 ... Jul 28
Winner takes Ga. bridges by 0.1% margin.*p56 ... Aug 4
Bids spread wide for Pa. sewer job. p56 ... Aug 4
Low bidder 19% below estimate for Colo. water diversion system. p77 ... Aug 18
Eleven vie for Conn. sewer job. p56 ... Aug 25
Low bidder 18% under Tex. flood control estimate. p56 ... Aug 25
Low bidder takes Va. hwy job by 4% margin. p39 ... Sep 1
Eighteen bid for Mich. relief sewer. p39 ... Sep 1
Bids spread wide for East Detroit sewer. p79 ... Sep 8
All bidders over Oakland marina estimate. p79 ... Sep 8
Six vie for Utah hwy project. p50 ... Sep 15
Winner 6% below estimate on N.J. sewer job. p131 ... Sep 22
Low bidder 3% below rival for La. revetment contract. p132 ... Sep 22
Winner takes Fla. bridge by 1% margin. p48 ... Sep 29
Ky. hwy job draws only two bidders. p131 ... Oct 6
Winner 14% below N.D. sewer estimate. p131 ... Oct 6
Winner takes Va. bridge by 2% margin. p55 ... Oct 13
Eight vie for Wis. sewer job. p55 ... Oct 13
Winner just 0.1% below Ga. hwy estimate. p66 ... Oct 20
Winner 13% below rival for Phoenix airport sewer job. p66 ... Oct 20
Low bidder 38% below San Fran sewer estimate. p56 ... Oct 27
Winner takes Iowa road job by 0.3% edge. p56 ... Oct 27
Winner outbids four for Ky. hwy job. p40 ... Nov 3
Low bidder 12% under Ga. bridge estimate. p40 ... Nov 3
Winner 39% over estimate for Vt. road job. p59 ... Nov 10
Nine vie for Baltimore subway station project. p59 ... Nov 10
Winner 13% below estimate for Ariz. road job. p78 ... Nov 17
Low bidder takes Iowa hwy project by 2% edge. p78 ... Nov 17
Low bidder 3% under Colo. hwy estimate. p56 ... Nov 24
Winner takes Ark. bridge job by 1% margin. p56 ... Nov 24
Only two bid for Ky. road project. p46 ... Dec 1
Winner 0.8% below rival for Ill. sewer job. p46 ... Dec 1
Bidding flap blocks Brooklyn sewerage award. p56 ... Dec 8
Winner 45% over Utah dam estimate. p56 ... Dec 8
Hwy bidder disqualified over penciled price. p52 ... Dec 15
Bidding errors disqualify firm for Brooklyn sewage job. p52 ... Dec 15
Lowest of seven bidders wins Ky. treatment plant contract. p108 ... Dec 22

CONSTRUCTION INDUSTRY see also: SPECIFICATIONS & STANDARDS, BUILDING CODES & INSPECTION, RESEARCH & TESTS
New single-voice talks continue. p68 ... Jul 21
Single voice on labor is formed (NCEC),*. p11 ... Aug 18
and e p72 ... Aug 25
Labor Dept reassures NCIC on construc committee aims,*. p14 ... Aug 18
When will Commerce form Office of Construc? e p98 ... Aug 18
OMB's Lance endorses idea of Federal Office of Construc. p12 ... Aug 25
Preserving the spirit of innovation. e p72 ... Aug 25
CCE board rejects single-voice proposal (NCEC),**. p10 ... Sep 8
Tax reform: construc asks relief,*. p10 ... Sep 15
Pay of 146 construc execs tops $100,000, tables,*. p26 ... Sep 15
NCEC Chicago meeting still on; list of members. p60 ... Sep 15
Strong recovery offsets rising prices. p206 ... Sep 22
17 groups meet to discuss single voice on labor (NCEC). p42 ... Oct 6
Principals report progress in single-voice effort (NCEC). p76 ... Oct 20
Georgine attacks Roundtable at ASCE meeting. p17 ... Oct 27
Commerce again promises construc listening post. WO p7 ... Nov 3
A single voice is being heard (NCIC). e p88 ... Nov 10
Roundtable report on special labor agreements. p89 ... Nov 17
and e p72 ... Dec 1
NCIC takes position opposing minorities program. p10 ... Nov 24
Single-voice industry group, NCEC, may be formed by Christmas,**. p57 ... Nov 24
It's time for management to pull together. e p72 ... Dec 1
AIA, NSPE plan to drop NCIC membership. CW p3 ... Dec 8
NCEC plans Jan. organization. p57 ... Dec 8
AIA left NCIC over policy differences. CW p3 ... Dec 15
AIA drops out of NCIC. e p188 ... Dec 22

CONSTRUCTION MANAGEMENT, see: MANAGEMENT

CONSULTANTS, see: ENGINEERING

CONTRACTORS; BIDS & CONTRACTS
GAO studying tax impact on Americans overseas. CW p3 ... Jul 7
Heavy construc projects lead recovery, table, map. p10 and e p74 ... Jul 7
DOT eases no-strike labor pact policy. p14 ... Jul 7
Contractors, banks discover each other,* Cover, p32 and e p74 ... Jul 7
and RC p14 ... Oct 6
IRS again delays its ruling on taxing travel pay. p55 ... Jul 7
50 Calif. groups seek to curb force account work. p55 ... Jul 7
Big San Fran sewer CM job let. CW p3 ... Jul 14
Calif. attack on force account work. CW p3 ... Jul 14
Contractors should hire alcoholics, addicts. CW p3 ... Jul 14
and RC p5 ... Aug 11
GSA decides to keep bid listing requirement for two months. WO p7 ... Jul 14
Risks kill Md.'s in-house CM plan for Baltimore transit. p11 ... Jul 14
Govt eyes 1980 Olympics CM bill. p14 ... Jul 14
MARTA subcontractor jailed. B p17 ... Jul 14
SBA halts, EPA supports minority set-aside plans. p57 ... Jul 14
New UA, NCA nat'l labor agreement. CW p3 ... Jul 21
Worker safety under study; new probe threatens OSHA. p13 ... Jul 21
Top contractors talk terms with Arabs in Geneva,**. p20 and e p82 ... Jul 21
and RC p5 ... Sep 15
New single-voice talks continue. p68 ... Jul 21
Diving safety rules surface. CW p3 ... Jul 28
Fla. project agreement puts lid on chemical complex wage increases. CW p3 ... Jul 28
Manufacturing contracts gain ground on '76 pace, table. p12 ... Jul 28
Hungry contractors drive Newark sewage plant bids down. p12 ... Jul 28
Chicago committee (CCCC) paves way for others. p57 ... Jul 28
New NCA-UA labor contract faces up to open shop,**. p58 ... Jul 28
Two specialty groups (MCAA, NAPHCC) form joint council. p58 ... Jul 28
Marshall says Carter backs OSHA; unveils paper work reduction plan,*. p59 ... Jul 28
AFL-CIO, AGC trade volleys on labor reform. CW p3 ... Aug 4
SBA Act: new set-asides for pockets of unemployment. CW p3 ... Aug 4
Court halts Calif. city's force account program. p58 ... Aug 4
Parsons takes Baltimore subway CM contract. CW p3 ... Aug 11
Union wounds self-inflicted, says AGC's Sprouse. CW p3 ... Aug 11
OPIC draws new criticism in Congress. WO p7 ... Aug 11
NCA sues NECA, IBEW over big electrical industry fund. p14 ... Aug 11
and e p98 ... Sep 8
Houston industrial agreement is dead. p49 ... Aug 11
Offices boost July contracts, table. p49 ... Aug 11
OSHA: it's bad, but what's better? e p64 ... Aug 11
Corps may set regional quotas for hiring minority firms. WO p7 ... Aug 18
Single voice on labor is formed (NCEC),*. p11 ... Aug 18
and e p72 ... Aug 25
Calif. licensing boards to evaluate energy conservation skills. p13 ... Aug 18
Labor Dept reassures NCIC on construc committee aims,*. p14 ... Aug 18
MBTA minority set-aside KO's low bid for Boston's South Cove tunnel. p15 ... Aug 18
McKee may buy Tulsa open shop company. p16 ... Aug 18
British overseas workers getting new tax breaks. p25 ... Aug 18
Small Finnish firms make big impact abroad,**. p30 ... Aug 18
NLRB again approves Kiewit's double-breasted operations. p84 ... Aug 18
Labor-management teamwork pays off in St. Louis. p85 ... Aug 18
NECA will fight NCA on industry fund. p85 ... Aug 18
When will Commerce form Office of Construc? e p98 ... Aug 18
Ease up on Americans abroad. e p98 ... Aug 18
ABC's Hogan concedes Korean contrib. CW p3 ... Aug 25
White House launches program to aid women-owned businesses. WO p7 ... Aug 25

Labor Dept sets hiring goals, rules for women, minorities. p8 ... Aug 25
OMB's Lance endorses idea of Federal Office of Construc. p12 ... Aug 25
OSHA offers states 90% funding for safety consultations. p14 ... Aug 25
Brooklyn, N.Y. Davis-Bacon violator pays $110,000. p57 ... Aug 25
Preserving the spirit of innovation. e p72 ... Aug 25
ASA files "reverse discrimination" brief. CW p3 ... Sep 1
Feds want data on female ownership of businesses. CW p3 ... Sep 1
Carter wants 10% minority business requirement met,*. p9 ... Sep 1
Phila subcontractor debarred for not meeting hiring goals on New Haven hospital job. p11 ... Sep 1
Culpepper, NCA chief, says problems are tied to politics,**. Cover, p20 and e p70 ... Sep 1
Profit picture brightens for construc, chart, tables. p8 ... Sep 8
and RC p4 ... Dec 1
CCE board rejects single-voice proposal (NCEC),**. p10 ... Sep 8
OSHA walk-around pay policy expected to be challenged. p12 ... Sep 8
Perini case heads for trial; disputes minority set-aside on Boston South Cove tunnel job. p12 ... Sep 8
MARTA minority subs seek quicker pay. p16 ... Sep 8
Manufacturing contracts rebound, table. p83 ... Sep 8
Calif. procurement study started. p84 ... Sep 8
Nominee to OSHA review panel may bring pro-labor tilt. WO p7 ... Sep 15
AGC, ABC, NAHM attack labor law reform bill,**. p57 ... Sep 15
Ala. must consider open shop rates. p58 ... Sep 15
J. A. Jones, Howard Electric join NCA. p58 ... Sep 15
NCEC Chicago meeting still on; list of members. p60 ... Sep 15
Quebec employers fight proposed antiscab law. p62 ... Sep 15
AGC may sue on public works minority issue. CW p3 ... Sep 22
Corps asks construc exemption from pre-merger notification rules. WO p7 ... Sep 22
Architect not in construc, says OSHA. p39 ... Sep 22
Bakke reverse bias suit nears Supreme Court hearing. p42 and e p206 ... Sep 22
ABC chapter seeks showdown on Baltimore agreement. p42 ... Sep 22
Rising costs loom for construc. p67 ... Sep 22
Reap rewards from steel industry problems,*. p87 ... Sep 22
GAO says overseas tax change would aid trade balance. WO p7 ... Sep 29
Minorities step up pressure for jobs, contracts. WO p7 ... Sep 29
Minority contracting: AGC set to challenge public works law. p8 and e p64 ... Sep 29
and RC p11 ... Oct 6
and RCs p9 ... Nov 17
and RC p4 ... Dec 8
Pa. contractors file public works minority suit. p51 ... Sep 29
Me. contractor illegally dumped union. p51 ... Sep 29
Contractor merger-acquisition service. p52 ... Sep 29
Tax breaks for work abroad may continue. WO p7 ... Oct 6
17 groups meet to discuss single voice on labor (NCEC). p42 ... Oct 6
Chicago committee backs public works set-asides. p43 ... Oct 6
Private minority set-aside agreements may be illegal (Baltimore). p43 ... Oct 6
Altemose fights to keep picketing ban,*. p43 ... Oct 6
N.J. contractors ask unions for voluntary wage freeze. p44 ... Oct 6
Supreme Court to rule on construc cases this term. p134 ... Oct 6
New travel tax rules expected. p135 ... Oct 6
Proposed OMB rules spell disclosure and paper work. p136 ... Oct 6
Ohio contractor settles OSHA discrimination case. p137 ... Oct 6
AGC tells Congress minority rules are wrong for construc. WO p7 ... Oct 13
OSHA speeds curbs on carcinogens. p15 ... Oct 13
Manufacturing plants top new contract awards, table. p57 ... Oct 13
No-strike pact doesn't bar sympathy actions (Kan.). p58 ... Oct 13
NCA trade mission to check Venezuelan market. p58 ... Oct 13
Minority contractors seek 10% set-aside in Denver. p58 ... Oct 13
Construc shifts to lower gear, chart, tables. p8 ... Oct 20
Saudis advised to ease contract terms, chart. p17 ... Oct 20
Multiple suits challenge validity of minority quotas,**. p73 ... Oct 20
Industry pension plans in danger. p75 ... Oct 20
Fairfax County, Va. design-build contracts attacked. p76 ... Oct 20
NIOSH: worker exposure to asphalt should be limited. p76 ... Oct 20
Principals report progress in single-voice effort (NCEC). p76 ... Oct 20
Mont., Ind. AGC locals tear into set-asides. p12 ... Oct 27
Georgine attacks Roundtable at ASCE meeting. p17 ... Oct 27
Open shop construc growing bigger, charts, table,**. Cover, p20 and e p80 ... Oct 27
Electrical fund challenged again. p57 ... Oct 27
OSHA 'walk-around pay may be challenged. p58 ... Oct 27
Controversial tax changes may be postponed. CW p3 ... Nov 3
Commerce again promises construc listening post. WO p7 ... Nov 3
Construc groups zero in on proposed female quotas,**. p8 ... Nov 3
NYC bonding tied to minority mandate. p9 ... Nov 3
South African precaster vies for Northeast rail corridor minority contract. p13 ... Nov 3
ABC hits minority quotas; releases new member survey,*. p53 ... Nov 3
Phila., Fla. AGC chapters file minority set-aside suits. p54 ... Nov 3
Congress set to extend overseas investment insurance program (OPIC). WO p7 ... Nov 10
AGC continues legal onslaught against minority set-asides,*. p11 ... Nov 10
Chicago hwy contractors guilty of bid-rigging, fraud. p15 ... Nov 10
EPA wants more minority participation. p19 ... Nov 10
Prehire contracts are a one-shot deal (Kan.). p62 and e p88 ... Nov 10
and RC p14 ... Dec 22
Utilities awards counter contracting lull, table. p62 ... Nov 10
Baltimore, Revere, Mass. contractors, city officials convicted for bid-rigging. p63 ... Nov 10
A single voice is being heard (NCIC). e p88 ... Nov 10
IBEW countersues NCA over industry fund. CW p3 ... Nov 17
Contractors still seared by heated competition,*. p14 ... Nov 17
ENR conf: claims abroad present extra risk. p16 ... Nov 17
M-K: planning for tomorrow,**. Cover and p30 ... Nov 17
AGC scores points, but no win, in Mont. p89 ... Nov 17
Roundtable report on special labor agreements. p89 ... Nov 17
and e p72 ... Dec 1
NUCA issues own minority set-aside policy. p89 ... Nov 17
and p10 ... Nov 24
Venezuela: a big construc market.*. p90 ... Nov 17
NLRB approves another double-breasted operation (Mich.). p90 and e p112 ... Nov 17
Supreme Court action makes owners liable for safety (Nev.). p91 ... Nov 17
Denver moves to increase minority firm participation. p91 ... Nov 17
EDA says grantees may do in-house design. p91 ... Nov 17
NLRB: union can't discipline boss (Wash.). p92 ... Nov 17
Counts to leave CMA in December. p92 ... Nov 17
British overseas work hits over $3 billion. p92 ... Nov 17
NCIC takes position opposing minorities program. p10 ... Nov 24
Single-voice industry group, NCEC, may be formed by Christmas,**. p57 ... Nov 24
Supreme Court allows NLRB to award attorney fees (Fla.). p57 ... Nov 24
AGC to get public interest award. p58 ... Nov 24
Calif. safety program results: injuries drop 26%. p59 ... Nov 24
Minority contracting: where it all stands. e p80 ... Nov 24
and e p80 ... Dec 8
Phila masonry contractor reinstated for federal work. CW p3 ... Dec 1
Carter backs force account rules,*. p10 ... Dec 1
WMATA renews Bechtel's CM contract. p10 ... Dec 1
Zachry grows on ideas that work,**. Cover and p18 ... Dec 1
GSA committee favors bid-listing rule. p53 ... Dec 1
NECA, IBEW defend their industry fund. p56 ... Dec 1
It's time for management to pull together. e p72 ... Dec 1
AIA, NSPE plan to drop NCIC membership. CW p3 ... Dec 8
NCIC, Commerce meet on minority contracting issue. WO p7 ... Dec 8
Courts may insist on arbitration in contract disputes. WO p7 ... Dec 8
Va. architect guarantees hospital project cost in writing,*. p40 GO ... Dec 8
Minority contractors protest AGC suits,**. p57 ... Dec 8
NCEC plans Jan. organization. p57 ... Dec 8
PRIDE program boosts construc in St. Louis,*. p59 ... Dec 8
OSHA inspectors must make walk-around pay rule known. p59 ... Dec 8
Heavy construc leads new awards, table. p60 ... Dec 8
AIA left NCIC over policy differences. CW p3 ... Dec 15
British contractors demand changes on tax law. p54 ... Dec 15
OSHA will drop a number of 'nit-picking' standards,*. p55 ... Dec 15
Court says OSHA doesn't protect workers who refuse dangerous jobs. p56 ... Dec 15
Vt. contractor gets relief from set-aside requirement. CW p3 ... Dec 22
Minority set-asides. RCs p17 ... Dec 22
Materials and money edge costs higher. p67 ... Dec 22
Ore. AGC-labor contracts enjoined. p175 ... Dec 22
AGC, ABC urge labor to compete by reform. p176 ... Dec 22
AIA drops out of NCIC. e p88 ... Dec 22

CONVEYOR BELTS, see: EQUIPMENT

CORPS OF ENGINEERS, see: ENGINEERING

CORROSION
Corroding bridges stall Cleveland's SOHIO project,**. p13 ... Jul 28
Decaying pontoons may sink Istanbul's Galata Bridge,**. p18 ... Aug 4
Chloride attack forces Calif. bridge column replacement,**. p20 ... Sep 29
Corroded rebars collapse Tex. high school stadium stand,**. p42 ... Oct 6
Crumbling Miami hotel faces razing. p12 ... Oct 20
British investigate post-war steel frames corrosion. p20 ... Nov 10

COURT CASES, see: LEGAL DEV.

CRITICAL PATH METHOD, see: MANAGEMENT

D

DAMS, see also: LOCKS; POWER; RIVERS
Conferees dump nine water projects,**. p8 ... Jul 28
and RC p10 ... Nov 17
Carter continues fight against water projects on hit list. WO p7 ... Aug 18
Quakes and concrete dams. RC p5 ... Aug 25
Asphalt-cement mix, cold ascon, forms cut-off walls and membranes. p17 ... Sep 15
BuRec sets stiffer procedures to assure dam safety,*. p11 ... Oct 27
Ga. finds 10 potential problem dams. p22 ... Nov 17
White House spurs dam inspection,**. p9 ... Dec 8
and e p72 ... Dec 15
Carter aides hassle over water project controversy. WO p7 ... Dec 15
La.'s Red River waterway gets under way. p11 ... Dec 15
Congress bars N.J. dams, map. p42 ... Dec 22

• American
Altus Dam
One of 17 to be modified,*. p11 ... Oct 27

Auburn Dam
Seismic study threatens dam,*. p9 ... July 7
Quakes and concrete dams. RC p5 ... Aug 25
BuRec findings conflict on safety. p13 ... Sep 29
Risks. RCs p2 ... Nov 3

R.D. Bailey Dam
Dambuilders battle erratic river, drawing,**. p36 ... Sep 8

Bonneville Dam
Bid call on second powerhouse. CW p3 ... Nov 10
Lock expansion. B p17 ... Nov 24
Squeezes in new powerhouse, map,**. p64 ... Dec 22

Columbia Dam
Rare species hits TVA dam. p15 ... Sep 1
Rare mussel another endangered species. CW p3 ... Sep 15

Conowingo Dam
Old dam tied down to bedrock, drawing,**. p18 ... Sep 1

Deerfield Dam
One of 17 to be modified,*. p11 ... Oct 27

Flaming Gorge Dam
Winner 45% over Utah dam estimate, unit prices. p56 ... Dec 8

Grand Coulee Dam
Reaches for new records, map,**. p22 ... Dec 1

Grayrocks Dam
Power co. starts dam without approval. p13 ... Dec 1

Hyrum Dam
One of 17 to be modified,*. p11 ... Oct 27

Kelly Barnes Lake Dam
Dam fails, map,**. p13 ... Nov 10

Kinzua Dam
Corps to study why fish don't bite. CW p3 ... Sep 1

Laural Run Dam
Johnstown, Pa. inundated again by record flood, map,**. p9 ... July 28

Nambe Falls Dam
Design, monitoring of more BuRec dams criticized,**. p11 ... July 21

New Melones Dam
Supreme Court will rule on western water fight. p14 ... Dec 15

Pueblo Dam
Design, monitoring of more BuRec dams criticized,**. p11 ... July 21
Deficiencies found in BuRec dam,*. p12 ... Aug 4

Racine Locks and Dam
Small powerplant a pacesetter,*. p11 ... Dec 8

Richard B. Russell Dam
Land condemnation for dam protested. B p17 ... Jul 7

Sandy Run Dam
Johnstown, Pa. inundated again by record flood, map,**. p9 ... Jul 28

Soldier Creek Dam
Design, monitoring of more BuRec dams criticized,**. p11 ... Jul 21

Tater Hill Lake Dam
Dam fails, map,**. p13 ... Nov 10

Tellico Dam
Snail darter massacre. p13 ... Nov 3
High court to decide on Endangered Species Act. p15 ... Nov 24

• Foreign
Argentina's Salto Grande complex,**. p20 ... Dec 8
Brazil: Russian machines for Itaipu. RC p8 ... Aug 4
Brazil: Generator flap frazzles Itaipu timetable. p19 ... Aug 4
Brazil's Itaipu hydro cost up 31% due to inflation. CW p3 ... Sep 1
Canada's Revelstoke Dam go-ahead. B p16 ... Sep 29
W. Germany: Frankfurt earthfill fails; no casualties,*. p13 ... Sep 1
Great Britain: Studies favor tidal power dam, drawing, map. p24 ... Jul 14
Guatemala's Chixoy R. dam. B p18 ... Sep 15

Nepal plans 3,600-Mw Karnali hydro. p15 ..... Sep 1
Pakistan: Tarbela basin 4 to be flip bucket; generator fails,*. p12 ..... Aug 4
and RC p5 ..... Nov 10
Pakistan: Tarbela reservoir filled to the brim. CW p3 ..... Sep 15
Pakistan: major erosion hits Tarbela Dam again; earlier problems, drawings,**. p37 ..... Sep 22
Pakistan: Another crash repair program begins at Tarbela Dam, drawing,*. p39 ..... Oct 6
Pakistan: Tarbela Dam: new erosion problem solved. p15 ..... Nov 17
Peru plans earthfill at Angostura. p20 ..... Nov 10
Turkish Karakaya hydro project. B p17 ..... Dec 1
USSR: Sayan's record powerhouse will spur Siberian development, map,**. Cover, p22 and e p82 ..... Jul 21
USSR: Boguchany hydro on Angara River. B p17 ..... Aug 11
USSR's Nurek earthfill rises to a record, sets stage for higher Rogun Dam,**. Cover and p50 ..... Sep 22
USSR: Nurek's reservoir creates a seismology lab, map. p53 ..... Sep 22
Venezuela's Guri Dam expansion job to Brazilians. CW p3 ..... Jul 7

DEBRIS, GARBAGE: see: HEALTH
see also: CITIES

DEFENSE, see: AIRPORTS; BUILDINGS; SPACE; CONSTRUCTION

DEMOLITION, see also: EXPLOSIVES
NYC: Decaying closed viaduct torn down,*. p14 ..... Aug 11
Tex. overrules landmark law, three Dallas bldgs felled,*. p15 ..... Sep 15
San Fran Intl Hotel demolition stopped at gunpoint,*. p16 ..... Sep 15
Okla City's Biltmore Hotel tallest steel-frame bldg felled by explosives,*. p12 ..... Oct 20
Crumbling Miami hotel faces razing. p12 ..... Oct 20
S.C.: pre-demolition office bldg collapse kills five. p12 ..... Oct 20
Pittsburgh bridge revamped with help of explosives firm. p17 ..... Nov 17
Demolition contractors fined for S.C. office bldg's early collapse. p13 ..... Dec 1
Explosives may raze NYC abandoned bldgs. p17 ..... Dec 8
Phila.'s old el defies destruction attempt,**. p39 ..... Dec 22

DESALTING, see: WATER SUPPLY, • Treatment

DETERGENTS, see: WATER POLLUTION

DIKES, see: DAMS
SOIL • Erosion, Shore Protection

DISASTERS, see: ACCIDENTS & DISASTERS

DISCRIMINATION, see: ETHICS • Civil Rights

DOCKS, see: PORTS AND HARBORS

DOMES, see ROOFS

DOORS AND WINDOWS, see: BUILDING DESIGN & COMPONENTS

DRAFTING, see: SURVEYING
see also: INSTRUMENTS & TOOLS

DRAINS, see: PIPES; SOIL; TUNNELS; WEATHER

DRAWING, see: SURVEYING
see also: INSTRUMENTS & TOOLS

DREDGING, see: SOIL

DRILLING, see: EQUIPMENT

DROUGHT, see: IRRIGATION; WATER RESOURCES; WEATHER

DRYDOCKS, see: PORTS AND HARBORS

E

EARTHQUAKES AND LANDSLIDES, see also: SOIL; Seismic Design; BUILDING CODES
Quakes and concrete dams. RC p5 ..... Aug 25
Congress okays $210-m for earthquake research,*. p13 ..... Sep 15
and RC p9 ..... Nov 24
Managua quake recovery,*. RC p5 ..... Oct 6
Japan: Steel pendulum may be quake protection,*. p15 ..... Oct 27
Auburn Dam risks. RCs p2 ..... Nov 3
Argentina quake kills 65 but not in seismic design area. CW p3 ..... Dec 1
Sweden: Landslide kills eight, destroys 67 homes,*. p11 ..... Dec 8
Computerized probe predicts soil behavior during quakes. p13 ..... Dec 15
CalTech seismologists report quake clusters may presage major temblors. p47 ..... Dec 22

ECONOMY, see also: CONSTRUCTION BUSINESS; TAXATION & TARIFFS; LABOR
• Hiring, Wages
SBA halts, EPA supports minority set-aside plans. p57 ..... Jul 14
OPEC: energy economics. e p72 ..... Jul 28
and RC p9 ..... Nov 24
SBA Act: New set-asides for pockets of unemployment. CW p3 ..... Aug 4
U.S. firms unveil foreign capital spending plans. p10 ..... Sep 1
Construc's growth rate prompts Fed-White House dispute. WO p7 ..... Sep 8
Admin seeks to slow inflation without controls. WO p7 ..... Sep 8
Carter unlikely to reappoint Burns. p14 ..... Sep 15
White House halts regional commissions, new towns programs,**. p38 ..... Sep 22
Inflation worries presage higher borrowing costs. p107 ..... Sep 22
Economic problems still plague foreign construc. p110 ..... Sep 22
Strong recovery offsets rising prices. p206 ..... Sep 22
SBA redefines A-E 'small business' p50 ..... Sep 29
Congress jeopardizes World Bank expansion plans. p46 ..... Oct 6
Standby credit law could shrink constructors' money pool. WO p7 ..... Oct 13
White House jawbones on rising interest rates. WO p7 ..... Oct 27
Business plans more dollars for new plants, equipment, table. p12 ..... Nov 10
Dependence on foreign oil: a threat worse than nuclear wastes. e p112 ..... Nov 17
Economy to pick up in first half of 1978. p19 ..... Dec 8
Economic uncertainties leave money cost outlook in limbo. p84 ..... Dec 22
Instability shakes worldwide recovery. p104 ..... Dec 22

EDUCATION & APPRENTICESHIP
see also: BUILDINGS • Schools
Practice is education. e p80 ..... Jul 14
and RC p5 ..... Aug 11
and RC p5 ..... Sep 22
and RCs p4 ..... Dec 15
On-the-job education. RC p9 ..... Jul 21
Fire group to train designers. p16 ..... Jul 21
Ironworker trainee program available to older workers. p58 ..... Jul 28
Marine training programs now offer civilian credit. p60 ..... Jul 28
Continuing education. RC p8 ..... Aug 4
Voorhees leaves consulting for academic career. p14 ..... Aug 18
New rules planned for female, minority trainee programs. p86 ..... Sep 8
NAHB to develop new kind of apprenticeship program. p193 ..... Sep 22
Teamsters eye education fund. p52 ..... Sep 29
Calif. architects want continuing education rule. p134 ..... Oct 6
NSF workshop on productivity in construc. CW p3 ..... Oct 13
AIA, PC members to swap data on complex bldg products. p11 ..... Oct 20
New apprenticeship rules proposed for women. p75 ..... Oct 20
Sloppy engineering education. RC p4 ..... Dec 8
Calif. bill on architects' continuing education dumped for voluntary plan. p15 ..... Dec 8
Some Iowa State U graduates PEs in construc. B p56 ..... Dec 22
Viewpoint: How to succeed in business: Making it to management. p59 ..... Dec 22

ELECTRICITY, see: POWER

ELECTRONICS, see: COMMUNICATIONS, ELECTRONICS

ENERGY, see: POWER

ENGINEERING
Supreme Court clears way for A-Es to advertise,*. p8 and e p74 ..... Jul 7
Advertising by design professionals. e p74 ..... Jul 7
and RC p4 ..... Jul 28
Professional liability premiums soar. p13 ..... Jul 14
GAO trims scope of Brooks procurement law. p16 ..... Jul 14
Practice is education. e p80 ..... Jul 14
and RC p5 ..... Aug 11
and RC p5 ..... Sep 22
and RCs p4 ..... Dec 15
Quebec language bill troublesome. p15 ..... Jul 21
Betz uses stock plan to sell its A-E firms to employees. p67 ..... Jul 21
U.S. agencies should sue A-Es more often, GAO report says. p10 ..... Jul 28
and RC p10 ..... Sep 22
and RC p5 ..... Oct 20
Knoxville adopts new ABA procurement code. p10 ..... Jul 28
and RC p5 ..... Aug 18
Corps may contract dredging. p15 ..... Jul 28
Parsons plans to purchase two eng firms. p59 ..... Jul 28
Iran port consultant correction. RC p8 ..... Aug 4
New York A-Es will be free to advertise fees. p13 ..... Aug 4
Minn. engineers win fight for top MDOT jobs. p50 ..... Aug 11
Senate plans probe on federal use of expert consultants. WO p7 ..... Aug 18
Federal construc agencies may be combined (GSA, Corps). WO p7 ..... Aug 18
Corps may set regional quotas for hiring minority firms. WO p7 ..... Aug 18
Calif. licensing boards to evaluate energy conservation skills. p13 ..... Aug 18
Corps to study why Kinzua Dam fish don't bite. CW p3 ..... Sep 1
Planning Research gets new officers, moves to Washington. p13 ..... Sep 1
Hartford tunnel extension biggest job for New England Corps. p14 ..... Sep 1
Profit picture brightens for construc. chart, tables. p8 ..... Sep 8
and RC p4 ..... Dec 1
Genge A-E firm reorganizes, will get new pres,*. p83 ..... Sep 8
Calif. procurement study started. p84 ..... Sep 8
ACEC plans preemptive action on ABA procurement code. WO p7 ..... Sep 15
R.I. court strikes down hoisting engineer licensing test. p62 ..... Sep 15
Corps to help EPA manage waste treatment construc. CW p3 ..... Sep 22
Lobbying crackdown may inadvertently include consultants. WO p7 ..... Sep 22
Corps asks construc exemption from pre-merger notification rules. WO p7 ..... Sep 22
EPA enlists Corps to manage sewage plant construc,*. p10 ..... Sep 29
House hearing on A-E selection no threat to Brooks Law,*. p50 ..... Sep 29
SBA redefines A-E 'small business'. p50 ..... Sep 29
Outsider named BuRec top eng,*. p43 ..... Oct 6
Corps into Pacific Northwest wind power. B p50 ..... Oct 6
ISE head: structural engineering has social, political implications. e p80 ..... Oct 13
Conflict of interest seen in Fla. zoo contract. p76 ..... Oct 20
Eng cleared of conflict of interest in Fla. zoo contract. CW p3 ..... Oct 27
Top 500 corrections. RCs p4 ..... Nov 3
ENR conf: claims abroad present extra risk. p16 ..... Nov 17
U.S. millions make Egypt bright market for A-Es, map. p37 ..... Nov 17
EDA says grantees may do in-house design. p91 ..... Nov 17
Corps' Northeast water supply plan proposes over $7 billion in jobs, map. p12 ..... Nov 24
CERL's research pays off on army projects, chart,**. p20 ..... Dec 1
A-Es may debate procurement issue. CW p3 ..... Dec 8
Sloppy engineering education. RC p4 ..... Dec 8
White House spurs dam inspection,**. p9 ..... Dec 8
and e p72 ..... Dec 15
New model A-E selection code proposed by NSPE. WO p7 ..... Dec 15
Zero based budgeting gets workout by Corps. p11 ..... Dec 15
Jacobs Engineering forms advisory group. p56 ..... Dec 15
Some Iowa State U graduates PEs in construc. B p56 ..... Dec 22
New OMB rules spell out when consultants are to be hired,*. p176 ..... Dec 22

• Employment, Fees, Manpower, Benefits
Industry pension plans in danger. p75 ..... Oct 20
Professional societies mount campaign against wage busting bill. CW p3 ..... Nov 3
Societies win wage busting battle with GAO help. WO p7 ..... Nov 10

• Societies
Disparate groups urge unity on clean water. p13 ..... Jul 14
Campaign mounts against wage busting bill. CW p3 ..... Nov 3
An idea for professional unity: American Eng Councils. e p72 ..... Nov 3
Societies win wage busting battle with GAO help. WO p7 ..... Nov 10
Iowa engineers settle antitrust suit. p55 ..... Dec 15

American Consulting Engineers Council
Plans preemptive action on ABA procurement code. WO p7 ..... Sep 15
Seeks better image to fight price competition,*. p135 ..... Oct 6

American Society of Civil Engineers
DOJ leads in case against ASCE. CW p3 ..... Aug 4
Court finds ASCE guilty of violating consent decree,**. p10 and e p64 ..... Aug 11
and RC p5 ..... Sep 15
Gibbs brings professionalism to ASCE,**. Cover and p24 ..... Oct 13
May ask for change in 1972 antitrust consent decree. p13 and e p80 ..... Oct 27
Study claims social, environmental rules lift construc costs. p14 ..... Oct 27
Happy 125th. e p72 ..... Nov 3
ASCE Viewpoint: Let's not deep-freeze so much of Alaska, map. p24 ..... Dec 8
Establishes service to advise members on ethics. p14 ..... Dec 15

Consulting Engineers of Ohio
Antitrust suit: Ohio eng societies charged with trade restraint. p13 ..... Aug 25

Engineers Joint Council
Report shows scarcity of minorities in eng, table. p58 ..... Dec 8

National Council of Engineering Examiners
Eng board examiners quizzed about bidding bans. WO p7 ..... Aug 4

National Society of Professional Engineers
Tackles energy problem. p16 ..... Jul 21
Case goes to U.S. Supreme Court. CW p3 ..... Oct 6
Societies win wage busting battle with GAO help. WO p7 ..... Nov 10
AIA, NSPE plan to drop NCIC membership. CW p3 ..... Dec 8
Proposes new model A-E selection code. WO p7 ..... Dec 15

Ohio Society of Professional Engineers
Antitrust suit: Ohio eng societies charged with trade restraint. p13 ..... Aug 25

ENGINEERING NEWS-RECORD
ENR on architects. RC p5 ..... Jul 7
ENR conf: claims abroad present extra risk. p16 ..... Nov 17

ENVIRONMENT, see: PLANNING & ENVIRONMENT
see also: ARCHITECTURE; HEALTH; CITIES

EPOXIES, see: ADHESIVES & COATINGS

EQUIPMENT & MATERIALS see also: PRODUCTS (by names of manufacturers); ALUMINUM, CONCRETE, STEEL, etc.

North Sea plow cuts trench in hard sea floor,*. p13 ... Jul 7
Thefts valued at $200-m per year by AGC, AED. B p17 ... Jul 7
Profits up for two equipment makers. p17 ... Jul 21
Equip firms say profits fell in 1976. p59 ... Jul 28
Canada: plow buries record submarine cable run,*. p15 ... Aug 4
Proposed tax incentives brighten Dallas solar trade show. p14 ... Sep 8
Alaska pipeline equip sale to throttle up. p16 ... Sep 8
Lumber leads material price gainers. p90 ... Sep 22
Machinery prices, sales climbing. p104 ... Sep 22
Product makers' profits up. p52 ... Sep 29
Alyeska sells to Mexicans, Alcan looks at camp sites. p42 ... Oct 6
AIA, PC members to swap data on complex building products. p11 ... Oct 20
Cat sales climbing. CW p3 ... Oct 27
Calif. safety board requires circuit breakers. p58 ... Oct 27
Fla. material suppliers sentenced for price fixing. p58 ... Oct 27
Business plans more dollars for new plants, equip, table. p12 ... Nov 10
Solar projects, energy programs get mixed reviews at Bldg Construc Expo and Conf,**. p19 ... Nov 10
NE Corridor to use latest tie, rail repair machine, map, drawing,*. p11 ... Nov 24
CIMA sees good '78 following excellent '77. p14 ... Nov 24
Nuts and bolts may face taxing problem. p9 ... Dec 15
A winner for Northeast Corridor concrete ties. CW p3 ... Dec 22
Bldg trades join AFL-CIO battle for protectionism. WO p7 ... Dec 22
Machinery prices show moderate gains as orders soar. p88 ... Dec 22

• Cranes, Hoisting, Lifting

Pa. dealer swaps cranes for antifreeze, Jello. p17 ... Aug 4
Rail cars bridge Wis. river for crane,*. p13 ... Aug 11
and e p72 ... Aug 25
Denver: job super's lift speeds apt. work,*. p11 ... Aug 25
Prototype beam lifting rig saves $90,000 at South Wales viaduct,**. p38 ... Sep 8
Marine crane hits San Fran-Oakland Bay Bridge. p49 ... Sep 22
Mobile Giant derrick scores high on big lift,*. p13 ... Oct 27
Gantry crane with record span to assemble floating reactors,**. Cover and p22 ... Nov 24

• Drilling

South Africa: I-R impact drill drives through hard rock fast. p14 ... Nov 3

• Earthmoving and Excavating

Modified boring machine makes up lost time in bad rock at Buckskin Mt. water tunnel, map,**. p18 ... Jul 7
and RC p4 ... Jul 28
EPA hits tractors with new noise rules. p15 ... Jul 21
Portugal: moles drive through rock to open water link to Sines industrial site,*. p17 ... Aug 25
World's largest tractor unveiled by Caterpillar,*. p39 ... Sep 22

• Shortages

NAHB predicts energy-related mtls shortages. CW p3 ... Jul 7
NAHB fears insulation shortages could slow home and bldg construc. WO p7 ... Sep 1
Insulation shortages stall housing work. CW p3 ... Nov 10
Shortages inflate costs, lengthen construc time. p81 ... Dec 22

• Trucks

Truck's load drops Ala. bridge span. CW p3 ... Oct 27

ETHICS

Supreme Court clears way for A-Es to advertise,*. p8 and e p74 ... Jul 7
Suspended architect sues AIA. CW p3 ... Jul 28
DOJ leads in case against ASCE. CW p3 ... Aug 4
Engineering board examiners quizzed about bidding bans. WO p7 ... Aug 4
Court finds ASCE guilty of violating consent decree,**. p10 and e p64 ... Aug 11
and RC p5 ... Sep 15
NCA sues NECA, IBEW over big electrical industry fund. p14 ... Aug 11
and e p98 ... Sep 8
Mass.: Middlesex courthouse $16-m price tag tripled,*. p25 ... Aug 11
Senate plans probe on federal use of expert consultants. WO p7 ... Aug 18
NECA will fight NCA on industry fund. p85 ... Aug 18
Antitrust suit charges Pa. roadwork monopoly. p85 ... Aug 18
ABC's Hogan concedes Korean contrib. CW p3 ... Aug 25
Payroll padding charged on S.C. Parr nuclear plant job. CW p3 ... Sep 8
N.J. eng pleads guilty to sewerage design fraud. p44 ... Sep 22
NSPE case goes to U.S. Supreme Court. CW p3 ... Oct 6
ACEC seeks better image to fight price competition,*. p135 ... Oct 6
Proposed OMB rules spell disclosure and paper work. p136 ... Oct 6
Embezzler loses job as Fla. union pension trustee. CW p3 ... Oct 13
Conflict of interest seen in Fla. zoo contract. p76 ... Oct 20
Eng cleared of conflict of interest in Fla. zoo contract. CW p3 ... Oct 27
ASCE may ask for change in 1972 antitrust consent decree. p13 and e p80 ... Oct 27
Electrical fund challenged again. p57 ... Oct 27
Fla. material suppliers sentenced for price fixing. p58 ... Oct 27
Chicago hwy contractors guilty of bid-rigging, fraud. p15 ... Nov 10
Congress nears completion of overseas bribery bill. p17 ... Nov 10
Baltimore, Revere, Mass. contractors, city officials convicted for bid-rigging. p63 ... Nov 10
IBEW countersues NCA over industry fund. CW p3 ... Nov 17
Five convicted for Chicago MSD sludge hauling bribes. p18 ... Nov 17
McDermott reports "questionable payments." CW p3 ... Nov 24
Court upholds CM extortion convictions of two former Mass. state senators. p11 ... Dec 1
NECA, IBEW defend their industry fund. p56 ... Dec 1
Mass., R.I. asphalt firms charged with antitrust violations. p15 ... Dec 8
ASCE establishes service to advise members on ethics. p14 ... Dec 15
Carter gets bill banning foreign bribery,*. p17 ... Dec 15
Iowa engineers settle antitrust suit. p55 ... Dec 15
Chicago MSD bribery convictions bring stiff sentences. p45 ... Dec 22

• Civil Rights

Contractors should hire alcoholics, addicts. CW p3 ... Jul 14
and RC p5 ... Aug 11
Don't condemn hometown plans. RC p5 ... Jul 14
SBA halts, EPA supports minority set-aside plans. p57 ... Jul 14
Labor Dept to issue new hiring rules. CW p3 ... Jul 21
Antiboycott rebuttals. RCs p9 ... Jul 21
Bldg trades list minority gains,*. p17 ... Jul 21
Labor Dept eyes female hiring goal. p60 ... Jul 28
Handicapped charges filed against three companies. p60 ... Jul 28
Hometown plans slated to go in Labor Dept antibias drive,**. p11 ... Aug 4
Norton sets new course for EEOC. p15 ... Aug 4
Antiboycott law merits support. RC p5 ... Aug 18
Corps may set regional quotas for hiring minority firms. WO p7 ... Aug 18
MBTA minority set-aside KO's low bid for Boston's South Cove tunnel. p15 ... Aug 18
White House launches program to aid women-owned businesses. WO p7 ... Aug 25
Labor Dept sets hiring goals, rules for women, minorities. p8 ... Aug 25
Antitrust suit: Ohio eng societies charged with trade restraint. p13 ... Aug 25
ASA files "reverse discrimination" brief. CW p3 ... Sep 1
Feds want data on female ownership of businesses. CW p3 ... Sep 1
Carter wants 10% minority business requirement met,*. p9 ... Sep 1
Phila subcontractor debarred for not meeting hiring goals on New Haven hospital job. p11 ... Sep 1
New antiboycott tax rules issued. p15 ... Sep 1
Perini case heads for trial; disputes minority set-aside on Boston South Cove tunnel job. p12 ... Sep 8
MARTA minority subs seek quicker pay. p16 ... Sep 8
Guam alien labor issue stalls work. p86 ... Sep 8
New rules planned for female, minority trainee programs. p86 ... Sep 8
N.Y. court overturns state minority hiring order. p15 ... Sep 15
AGC may sue on public works minority issue. CW p3 ... Sep 22
Bakke reverse bias suit nears Supreme Court hearing. p42 and e p206 ... Sep 22
Minorities step up pressure for jobs, contracts. WO p7 ... Sep 29
Minority contracting: AGC set to challenge public works law. p8 and e p64 ... Sep 29
and RC p11 ... Oct 6
and RCs p9 ... Nov 17
and RC p4 ... Dec 8
Arab boycott rules are open for comment. p10 ... Sep 29
Pa. contractors file public works minority suit. p51 ... Sep 29
Chicago committee backs public works set-asides. p43 ... Oct 6
Private minority set-aside agreements may be illegal (Baltimore). p43 ... Oct 6
Supreme Court to rule on construc cases this term. p134 ... Oct 6
Ohio contractor settles OSHA discrimination case. p137 ... Oct 6
AGC tells Congress minority rules are wrong for construc. WO p7 ... Oct 13
Minority contractors seek a 10% set-aside in Denver. p58 ... Oct 13
Multiple suits challenge validity of minority quotas,**. p73 ... Oct 20
New apprenticeship rules proposed for women. p75 ... Oct 20
Mont., Ind. AGC locals tear into set-asides. p12 ... Oct 27
Anti-bias compliance is changed. p58 ... Oct 27
Egyptian venture may ease Arab boycott of Ford. CW p3 ... Nov 3
Construc groups zero in on proposed female quotas,**. p8 ... Nov 3
NYC bonding tied to minority mandate. p9 ... Nov 3
South African precaster vies for Northeast rail corridor minority contract. p13 ... Nov 3
ABC hits minority quotas; releases new member survey,*. p53 ... Nov 3
Phila., Fla. AGC chapters file minority set-aside suits. p54 ... Nov 3
AGC continues legal onslaught against minority set-asides,*. p11 ... Nov 10
EPA wants more minority participation. p19 ... Nov 10
AGC scores points, but no win, in Mont. p89 ... Nov 17
NUCA issues own minority set-aside policy. p89 ... Nov 17
and p10 ... Nov 24
Denver moves to increase minority firm participation. p91 ... Nov 17
Racial bias won't be considered in jurisdictional dispute cases. p91 ... Nov 17
Boycott law helps business. RC p9 ... Nov 24
NCIC takes position opposing minorities program. p10 ... Nov 24
Antiredlining rules get promoters. p12 ... Nov 24
Minority contracting: where it all stands. e p80 ... Nov 24
and e p80 ... Dec 8
Phila masonry contractor reinstated for federal work. CW p3 ... Dec 1
Minority hiring: 20% goal for Atlantic City casinos. p55 ... Dec 1
NCIC, Commerce meet on minority contracting issue. WO p7 ... Dec 8
Some affirmative action hiring plans may be illegal. WO p7 ... Dec 8
Minority contractors protest AGC suits,**. p57 ... Dec 8
EJC report shows scarcity of minorities in eng, table. p58 ... Dec 8
Supreme Court rules on Toledo low-income housing decision. p14 ... Dec 15
Supreme Court rules on pregnant workers' rights. p14 ... Dec 15
Vt. contractor gets relief from set-aside requirement. CW p3 ... Dec 22
Minority set-asides. RCs p17 ... Dec 22
OFCCP free to set contract terms (La.). p175 ... Dec 22
Supreme Court ruling may clarify antibias law compliance (Chicago). p178 ... Dec 22

EXCAVATING, see: SOIL; see also: EQUIPMENT

EXPLOSIVES, see also: DEMOLITION

Fatal Alaska pipeline blast levels pump bldg.,**. p10 ... Jul 14
Alaska pipeline blast laid to safety violations. CW p3 ... Jul 21
Faulty weld cited in Pa. powerplant explosion. p16 ... Aug 18
Okla City: steel-frame Biltmore hotel to be blown up. CW p3 ... Aug 25
Explosives may raze NYC abandoned bldgs. p17 ... Dec 8

EXPORTS, see: ECONOMY; see also: TAXES & TARIFFS

F

FAILURES, see: ACCIDENTS AND FAILURES

FAIRS, see: CITIES see also: BUILDINGS

FANNIE MAE, see: HOUSING

FEDERAL AVIATION AGENCY, see: AIRPORTS

FIRES, see also: ACCIDENTS • Safety; BUILDING CODES

Filtration plant fire slashes water supply in D.C. suburbs. CW p3 ... Jul 14
Fire twists Denver steel bridge girders,**. p14 ... Jul 21
Fire group to train designers. p16 ... Jul 21
U.S. to host fire safety sales group in Moscow. CW p3 ... Aug 4
House opens hearings on federal fire code. p16 ... Aug 4
Study of combustibles in prisons. B p25 ... Aug 18
Combined bar joist and sprinkler system, Hydra-Strut, cuts cost, drawings. p29 ... Aug 18
Insulation safety standards a must, say advocates. p11 ... Sep 1
Ky. club blaze report points to code violations. CW p3 ... Sep 22
Report links Ky. club fire, lack of code enforcement,*. p11 and e p64 ... Sep 29
NYC Third Water Tunnel fire takes job's 17th life. p11 ... Oct 20
and RC p5 ... Dec 8
Insulation flammability probed. CW p3 ... Nov 17
Chute, slide speed escape from fires in high-rises. p17 ... Dec 8

FISH, see: DAMS; RIVERS; WATER POLLUTION

FLOODS, see also: RIVERS; WATER RESOURCES; WEATHER

Johnstown, Pa. inundated again by record flood, map,**. p9 ... Jul 28
Flood insurance flap jeopardizes development. WO p7 ... Aug 25
Low bidder 18% under Tex. flood control estimate, unit prices. p56 ... Aug 25
Flooding hits Mo., Kan., Neb., damage in millions. p47 ... Sep 22
Mojave Desert flood cuts off L.A. water supply from Colorado R. Aqueduct. p47 ... Sep 22
Carter still wants to restrict building in flood plains. WO p7 ... Oct 20
Dam collapses in Southeast spur federal inspection plan, map,**. p13 ... Nov 10
Deluge doesn't stop N.J. Meadowlands sports arena. p17 ... Nov 17
Fall flooding ravages N.C. roads, bridges. p14 ... Dec 8
Flood barrier will protect Leningrad from sea storms. p13 ... Dec 15
Congress bars N.J. dams, map. p42 ... Dec 22
HUD prepares U.S. takeover of flood insurance programs. p42 ... Dec 22

FLOORS, see: BUILDING DESIGN & COMPONENTS • Ceilings and Floors

FLUORIDATION, see: WATER SUPPLY • Treatment

FOUNDATIONS, see: BRIDGES; BUILDINGS; PILES; SOIL

FOUNTAINS
Splashy fountain bejewels Detroit civic center plaza,**. p64 ... Oct 6

FRAMING, see: BEAMS & COLUMNS; CONCRETE; STEEL; ROOFS

FROST, see: WEATHER

FUEL AND LUBRICANTS
ERDA will test fuel cell in NYC. p15 ... Aug 25
New firm concentrates on AFB coal combustion. p15 ... Dec 1
Water-magma mix: Hot new fuel idea. p16 ... Dec 1

G

GARAGES, see: BUILDINGS

GARBAGE, see: HEALTH

GAS, see: PIPES; UTILITIES

GENERAL SERVICES ADMINISTRATION, see: BUILDINGS, • Federal

GIRDERS, see: BEAMS

GLASS
Window-watching again in Boston's Hancock Tower. CW p3 ... Jul 21
Boston Hancock windows will get 18-hour watch,*. p15 ... Jul 28
Boston's Hancock loses 23rd new window. CW p3 ... Aug 11
Boston: another Hancock pane pops. p15 ... Sep 1
Salvaged Hancock windows are cracking up in Me. p15 ... Sep 15
Hyatt Regency conservation. RC p4 ... Nov 3
Glass, concrete triangles, roof Riyadh airport terminals,**. p15 ... Nov 17

GROUT, see: CONCRETE; SOIL

H

HEALTH, SANITATION see also: WATER POLLUTION; PLANNING & ENVIRONMENT
Bill relaxing clean air rules again in trouble. WO p7 ... Jul 7
EPA to limit asbestos quarry. B p17 ... Jul 7
EPA seeks solid waste suggestions. CW p3 ... Jul 14
Worker safety under study; new probe threatens OSHA. p13 ... Jul 21
EPA report: scrub coal plant fumes. CW p3 ... Jul 28
Diving safety rules surface. CW p3 ... Jul 28
EPA, states sue TVA on emissions. p14 ... Jul 28
Marshall says Carter backs OSHA; unveils paper work reduction plan,*. p59 ... Jul 28
Reducing blackout problems: garbage-to-energy plants. e p72 ... Jul 28
and RC p4 ... Dec 8
Clean Air Act has leeway for growth. p12 ... Aug 11
OSHA: it's bad, but what's better? e p64 ... Aug 11
Port of Long Beach enters Alaskan crude terminal fight. CW p3 ... Aug 25
OSHA offers states 90% funding for safety consultations. p14 ... Aug 25
Calif. counties institute fees-for-air-pollution system. p14 ... Aug 25
Problem asbestos at N.J. schools gets sealant coat,*. p11 ... Sep 1
Insulation safety standards a must, say advocates. p11 ... Sep 1
OSHA walk-around pay policy expected to be challenged. p12 ... Sep 8
Nominee to OSHA review panel may bring pro-labor tilt. WO p7 ... Sep 15
Cities mine solid waste piles,**. Cover, p20 and e p80 ... Sep 15
Technology: the search goes on to reclaim mtls and energy from municipal refuse,*. p22 ... Sep 15
Baltimore demonstration is costly primer on pyrolysis,*. p22 ... Sep 15
Conn. leads in implementing waste plans. p24 ... Sep 15
NYC Westway flunks pollution test. CW p3 ... Sep 22
Don't drink wastewater. RC p20 ... Sep 22
Architect not in construc, says OSHA. p39 ... Sep 22
Long Beach port plan progresses. p9 ... Sep 29
Another delay for Long Beach oil port. CW p3 ... Oct 6
Contra Costa, Calif. energy guzzling sewage plant will fuel itself by pyrolysis, drawing,**. p70 ... Oct 6
Pyrolyzing sewage sludge alone moves slowly toward market place,*. p76 ... Oct 6
Ohio contractor settles OSHA discrimination case. p137 ... Oct 6
OSHA speeds curbs on carcinogens. p15 ... Oct 13
NIOSH: worker exposure to asphalt should be limited. p76 ... Oct 20
Do we overspend on environment? e p88 ... Oct 20
and RC p4 ... Dec 15
EPA begins crackdown on federal agency pollution. WO p7 ... Oct 27
OSHA 'walk-around' pay may be challenged. p58 ... Oct 27
Some coal-fired powerplants escape emission requirements,*. p10 ... Nov 3
L.A. area powerplant air cleanup may cost billions. p10 ... Nov 3
Worries over airborne asbestos may restrict rock quarries. WO p7 ... Nov 17
Fluidized bed cuts Tokyo incinerator ash, drawing. p19 ... Nov 17
NYC's Westway would meet air pollution standards. CW p3 ... Nov 24
Calif. safety program results: injuries drop 26%. p59 ... Nov 24
EPA eases solid waste rules to encourage state participation. WO p7 ... Dec 1
TVA scrubs air cleanup fight. p14 ... Dec 1
EPA enforcement plan takes profit from pollution. p10 ... Dec 8
Asbestos patching mixes banned as carcinogenic. p13 ... Dec 8
High court takes up N.J. ban on out of state waste dumping. p17 ... Dec 8
South African pollution. B p19 ... Dec 8
OSHA inspectors must make walk-around pay rule known. p59 ... Dec 8
OSHA will drop a number of 'nit-picking' standards,*. p55 ... Dec 15
Court says OSHA doesn't protect workers who refuse dangerous jobs. p56 ... Dec 15
S.C. may sue Savannah R. plant for air pollution violations. p44 ... Dec 22
Fabric filters bag coal plant ash,**. p48 ... Dec 22

HEATING, see: AIR CONDITIONING, HEATING

HIGHWAY DESIGN, MAINTENANCE & SAFETY see also: WEATHER
FHWA drops metric signs. B p21 ... Jul 21
FHWA report calls for repair of 8,000 miles of Interstate,*. p11 ... Oct 13
Utah winterizing hwy markers. p18 ... Oct 27
Reduced hwy standards stir up controversy. p9 and e p72 ... Dec 1
FHWA officials think they are too chummy with AASHTO. WO p7 ... Dec 15
Design change in N.H. ends 20-year I-state battle. p44 ... Dec 22

HIGHWAYS
Senators want hwy trust fund abolished. WO p7 ... Aug 4
I-state completion plans could change funding,*. p13 ... Aug 4
Roads generally fare well during heat wave. p16 ... Aug 4
FHWA clears higher NYC area tolls to help finance mass transit. p15 ... Aug 18
Poll shows Americans want better roads, bridges. CW p3 ... Sep 15
ARTBA steers new transp course,*. p25 ... Sep 15
More work, fewer bidders hike hwy costs. p125 ... Sep 22
Transp goals still a mixed bag. p14 ... Oct 27
Nation's roads deteriorating rapidly, chart, table. p14 ... Nov 10
DOT pushes for I-state cut-off, table,**. p8 ... Dec 1
Reduced hwy standards stir up controversy. p9 and e p72 ... Dec 1
FHWA officials think they are too chummy with AASHTO. WO p7 ... Dec 15
First border-to-border I-state completed as Ga. link opens, map. p40 ... Dec 22
DOT studies remote sensing techniques to survey wetlands for road construc. p56 ... Dec 22
Excavation, surfacing hike road costs. p97 ... Dec 22

• American
Arizona
Winner 13% below estimate for road job, unit prices. p78 ... Nov 17

California
Calif. attack on force account work. CW p3 ... Jul 14
San Fran beach, Great Hwy, sewer plan rolled into one, drawing. p44 ... Oct 6
Hwy fund reserves hit new high. p13 ... Oct 13
Italian pile system supports slide,*. p16 ... Nov 24
Computer keeps an eye on freeway travelers, map,*. p18 ... Dec 8

Colorado
Low bidder 3% under hwy estimate, unit prices. p56 ... Nov 24

Delaware
Del. construc freeze ends, but workers are let go. p14 ... Dec 1

Georgia
Winner just 0.1% below estimate, unit prices. p66 ... Oct 20
First border-to-border I-state completed as Ga. link opens, map. p40 ... Dec 22

Illinois
Chicago Crosstown Expressway funds switched to transit needs. p15 ... Nov 3
Chicago hwy contractors guilty of bid-rigging, fraud. p15 ... Nov 10

Indiana
AGC protest over set-asides halts road bids. p12 ... Oct 27
Officials bidding sad adieu to toll-road debt. p18 ... Nov 10

Iowa
Winner takes road job by 0.3% edge, unit prices. p56 ... Oct 27
Low bidder takes hwy project by 2% edge, unit prices. p78 ... Nov 17

Kentucky
Job draws only two bidders, unit prices. p131 ... Oct 6
Winner outbids four for hwy job, unit prices. p40 ... Nov 3
Only two bid for road project, unit prices. p46 ... Dec 1

Louisiana
Hwy bidder disqualified over penciled price, unit prices. p52 ... Dec 15

Maryland
EPA to limit asbestos quarry. B p17 ... Jul 7
Worries over airborne asbestos may restrict rock quarries. WO p7 ... Nov 17

Michigan
Court okays sharing hwy wealth. B p19 ... Dec 8

New Hampshire
Design change in N.H. ends 20-year I-state battle. p44 ... Dec 22

New York
NYC Westway plan hit for $327-m. p16 ... Jul 21
Westway flunks pollution test. CW p3 ... Sep 22
Westway threatened by new mayor. p19 ... Nov 17
Westway would meet air pollution standards. CW p3 ... Nov 24

North Carolina
10-month-old highway crumbling. p15 ... Aug 25
and RC p16 ... Oct 6
Rains, poor base crumbled road. p29 ... Nov 17
Fall flooding ravages roads, bridges. p14 ... Dec 8

Pennsylvania
Halts design on bond-backed roads. p15 ... Jul 21
Antitrust suit charges Pa. roadwork monopoly. p85 ... Aug 18
Pa. hwy cutbacks cause non-construc jobs loss. CW p3 ... Oct 27
Roadbuilding halted pending tax hike. p18 ... Oct 27
State ponders buying an I-state,*. p13 ... Dec 1

Tennessee
Eight of 13 bid below road estimate, unit prices. p52 ... Jul 14

Texas
Dallas underpasses built in halves as tiebacks support trackbed. p28 ... Jul 21
Officials bidding sad adieu to toll-road debt. p18 ... Nov 10
Crumbling Dallas roadway is good without repaving,**. p24 ... Dec 1

Utah
Six vie for hwy project, unit prices. p50 ... Sep 15
Winterizing hwy markers. p18 ... Oct 27

Vermont
Winner 39% over estimate for road job, unit prices. p59 ... Nov 10

Virginia
Court denies I-66 injunction. CW p3 ... Aug 25
Low bidder takes hwy job by 4% margin, unit prices. p39 ... Sep 1
Va. fights I-66 Davis-Bacon rates. p16 and e p80 ... Dec 8

Washington
Close vote, slow count keep roadbuilders on edge. p16 ... Nov 24
Recount of votes on gas tax reduction starts this week. p19 ... Dec 8
Plurality of 889 votes blocks $97-m road budget cut. p42 ... Dec 22

West Virginia
West Va. Turnpike: three major toll routes remain in default, map,**. p20 ... Oct 13
Reinforced Earth system's 50-ft walls prevent embankment slides on hilly hwy. p16 ... Dec 15

• Foreign
Request for info from Inter-American Hwy builders. RC p10 ... Nov 17
UN, breaking tradition, builds W. African roads itself. p15 ... Dec 15
Canada: sulfur/asphalt hits 6-mile record on Alberta hwy job. p15 ... Dec 1
China to import aid to build nation's hwys. p12 ... Dec 1
Hong Kong plans $4.2 billion transport scheme, map,*. p45 ... Nov 17
Japan slows hwy pace. B p17 ... Jul 7
Mexico City plans new hwys. B p20 ... Nov 10
Philippines puts hwy contracts on ice, map. p11 ... Dec 1
Saudi Arabia: DOT takes on hwys. p16 ... Sep 15
Turkey plans $14-billion hwy program, map. p16 ... Jul 14
Turkey: $5-billion hwy. B p50 ... Oct 6
Yemen wants one contractor for 1,500-mile hwy. B p56 ... Dec 22

HOUSING, see also: BUILDINGS; CITIES
NAHB predicts energy-related materials shortages. CW p3 ... Jul 7
HUD funds to halt if cities don't help poor. p12 ... Jul 7
Leave FHA as is, report says. p14 ... Jul 14
Housing subsidies will not give way to welfare reform. WO p7 ... Jul 21
HUD scraps low-wage rehab program. WO p7 ... Jul 28
Senators don't like HUD red tape on cities pilot program. CW p3 ... Aug 4
Lake Placid: Olympics housing to become prison. p18 ... Aug 18
Flood insurance flap jeopardizes development. WO p7 ... Aug 25
NAHB fears insulation shortages could slow home and bldg construc. WO p7 ... Sep 1
COWPS to study lumber prices. p15 ... Sep 1
Air bag foundation planned for Alaska housing on arctic permafrost,*. p14 ... Sep 15
and RC p14 ... Dec 22
Me. Indian land claims stir fears about loans. p17 ... Sep 15
White House halts regional commissions, new towns programs,**. p38 ... Sep 22
NAHB to develop new kind of apprenticeship program. p193 ... Sep 22

$12.4-billion housing bill favors old, ailing cities. p38 ... Oct 6
Report alleges HUD housing fraud in razed Atlanta complex,*. p46 ... Oct 6
Seattle trades try to recover housing work. p135 ... Oct 6
Rise in short-term interest rates stirs fears. p15 ... Oct 13
NAHB asks Congress to probe lumber prices. p58 ... Oct 13
Money woes may place damper on homebuilding boom. WO p7 ... Oct 20
Starrett tops out Iranian high-rises in Farahzad new town,*. p17 ... Oct 27
HUD squeezing Fannie Mae for more inner-city financing. p11 and e p72 ... Nov 3
San Fran: Bank of America to introduce new home mortgage. p15 ... Nov 3
Insulation shortages stall housing work. CW p3 ... Nov 10
HUD community development block grant rules draw fire,*. p15 ... Nov 10
and e p112 ... Nov 17
Homebuilding expected to remain strong next year. p16 ... Nov 10
Sprayed concrete system raises a house a day,**. p25 ... Nov 10
Bank board proposes S&Ls lend more in core of cities. p24 ... Nov 17
NAHB guidelines for insulating houses. B p29 ... Nov 17
HUD gears up for bigger Davis-Bacon enforcement program. WO p7 ... Nov 24
Antiredlining rules get promoters. p12 ... Nov 24
NAHB sees two-year slide for housing. p13 ... Nov 24
Energy, housing rehab big at British show, Interbuild. p14 ... Nov 24
Saudi housing job near Damman. B p17 ... Nov 24
Cities will be penalized for low-income housing failures. WO p7 ... Dec 1
Gulf Oil will sell Fla. properties. p15 ... Dec 1
NAHB in 44 states offers buyer protection (HOW). p55 ... Dec 1
Reinstatement of tax breaks could spark Boston bldg boomlet. p19 ... Dec 8
Homebuilders trip on bonding rules. p12 ... Dec 15
Cash gives mortgage debt a lift (FLIP). p13 ... Dec 15
Supreme Court rules on Toledo low-income housing decision. p14 ... Dec 15
Davis-Bacon crackdown under way,*. p53 ... Dec 15
HUD prepares U.S. takeover of flood insurance program. p42 ... Dec 22

I

ICE, see: SOIL; WEATHER

INCINERATORS, see: HEALTH

INDUSTRIAL PARKS, PLANTS, SITES, see: BUILDINGS; CITIES

INDUSTRIAL WASTES, see: WATER POLLUTION

INFLATION, see: ECONOMY

INSPECTION, see: BUILDING CODES

INSULATION: see ADHESIVES, COATINGS, INSULATION, PAINT

INSURANCE
U.S. encouraging World Bank, OPIC investment in developing countries. WO p7 ... Jul 14
Professional liability premiums soar. p13 ... Jul 14
OPIC draws new criticism in Congress. WO p7 ... Aug 11
Flood insurance flap jeopardizes development. WO p7 ... Aug 25
Industry pension plans in danger. p75 ... Oct 20
NYC bonding tied to minority mandate. p9 ... Nov 3
Congress set to extend overseas investment insurance program (OPIC). WO p7 ... Nov 10
NAHB in 44 states offers buyer protection (HOW). p55 ... Dec 1
HUD prepares U.S. takeover of flood insurance programs. p42 ... Dec 22

INTERNATIONAL
European breeder accord a Carter setback. p12 ... Jul 14
Antiboycott rebuttals. RCs p9 ... Jul 21
Top contractors talk terms with Arabs in Geneva,**. p20 and e p82 ... Jul 21
and RC p5 ... Sep 15
OPEC: energy economics. e p72 ... Jul 28
and RC p9 ... Nov 24
Antiboycott law merits support. RC p5 ... Aug 18
New antiboycott tax rules issued. p15 ... Sep 1
Arab boycott rules are open for comment. p10 ... Sep 29
Egyptian venture may ease Arab boycott of Ford. CW p3 ... Nov 3
Request for info from Inter-American hwy builders. RC p10 ... Nov 17
Boycott law helps business. RC p9 ... Nov 24
UN, breaking tradition, builds W. African roads itself. p15 ... Dec 15
U.S. tax rules questioned. RC p28 ... Dec 22

• By Country

Abu Dhabi
Winning design for Abu Dhabi natl assembly hall too costly,*. p18 ... Aug 18

Afghanistan
French design rail system. B p19 ... Dec 8

Algeria
Studies for trans-Sahara railway. B p17 ... Dec 1

Argentina
Quake kills 65 but not in seismic design area. CW p3 ... Dec 1
Tapping hydropower to the tune of $12 billion, map,**. p20 ... Dec 8

Australia
Derailment inevitable. B p17 ... Jul 7
Looming oil crunch fuels alternative energy hunt,**. p32 ... Aug 4
To resume uranium shipments. CW p3 ... Aug 18
Roots of Sydney M.L.C. Centre forming innovation. RCs p28 ... Oct 6
Welder frees oxygen, hydrogen from H_2O. p16 ... Dec 15

Belgium
Europe's longest curved box girders hurdle obstacles in Brussels,**. Cover and p18 ... Oct 20

Brazil
Office bldg. collapse in Brazil fatal to 19. p15 ... Jul 14
Epoxy asphalt cracks on box girder bridge. p15 ... Jul 28
Russian machines for Itaipu. RC p8 ... Aug 4
Generator flap frazzles Itaipu timetable. p19 ... Aug 4
Itaipu hydro cost up 31% due to inflation. CW p3 ... Sep 1
Itaipu power accord set, big generator bids moving. p18 ... Nov 17
Rio apt. bldg. shored against sinking into beach. p20 ... Nov 17
Floating plant to set sail for Brazil,*. p22 ... Nov 17
Brazil borrowing boost adds power to energy plan. p29 ... Nov 17
$4.7 billion for Sao Paulo sewers marks investment shift,*. p44 ... Dec 22

Canada
U.S. interagency group favors Alcan gas line route. CW p3 ... Jul 7
$10-billion Alcan gas line gets nod from energy board, map,**. p9 and e p80 ... Jul 14
Canada drops nuclear chief after losses. p15 ... Jul 21
Quebec language bill troublesome. p15 ... Jul 21
Ont. schedules third nuclear plant (Darlington). CW p3 ... Jul 28
Plow buries record submarine cable run,*. p15 ... Aug 4
$10-billion Alcan gas project can proceed. p12 ... Aug 11
Canada re-insulating homes. B p17 ... Aug 11
Backs $10-billion Alcan gas pipeline. CW p3 ... Aug 18
U.S., Canada clear $14-billion Alcan gas line, map,**. p9 and e p80 ... Sep 15
Quebec employers fight proposed antiscab law. p62 ... Sep 15
Alcan pipeline agreement signed, Long Beach port plan progresses. p9 ... Sep 29
Revelstoke Dam go-ahead. B p16 ... Sep 29
$500-m LNG terminal challenged, map. p13 ... Oct 13
Dakotas' irrigation project jeopardized. p9 ... Oct 20
Montreal Olympic Stadium roof. B p17 ... Nov 24
Sulfur/asphalt hits 6-mile record on Alberta hwy job. p15 ... Dec 1
U.S. power flows from Canadian water storage, map. p23 ... Dec 1
Italian agreement promotes sale of reactors. p16 ... Dec 8
Alcan gas pipeline builder presses for loan guarantees, map. p8 ... Dec 15

Chile
Solar furnace planned for Chilean desert. p15 ... Dec 8

China
To import aid to build nation's hwys. p12 ... Dec 1

Dubai
Largest dry dock running 25% over budget,*. p15 ... Dec 15

Egypt
Cairo mass transit extension may be delayed. B p17 ... Jul 7
U.S. consultants for water, sewerage programs. B p17 ... Aug 11
Swaps workers for currency,**. p25 ... Sep 1
and RC p6 ... Dec 15
Aquifer discovery brightens future. CW p3 ... Sep 8
Big Cairo sewer project. CW p3 ... Oct 27
Egyptian venture may ease Arab boycott of Ford. CW p3 ... Nov 3
Desert new towns rejected by funding agencies. p20 ... Nov 17
U.S. millions make Egypt bright market for A-Es, map. p37 ... Nov 17

Finland
Small Finnish firms make big impact abroad,**. p30 ... Aug 18

France
Paris-Moscow embassy swap delayed. p13 ... Jul 7
Blood shed over French A-plant,*. p15 ... Aug 11
Eiffel Tower still sound. B p17 ... Aug 11
Tall bldgs mtg examines urban explosion, in Paris. p9 and e p72 ... Dec 1
Huge Les Halles station ties together Paris transit, drawing, map,**. Cover and p18 ... Dec 15

Germany
War-weakened bldg restored as concert hall in Dusseldorf,*. p17 ... Jul 21
Floating gas plants feasible, Dusseldorf conf. told. CW p3 ... Sep 1
Frankfurt earthfill fails; no casualties,*. p13 ... Sep 1
Scaffold collapses at bridge job. B p20 ... Nov 10
Extruded span cuts Mainflingen Bridge costs in half,**. p38 ... Nov 17
W. German Europa Canal project jeopardized, map. p15 ... Nov 24
Wraparound roof straddles West Berlin's Congress Center to quiet din, drawings,**. p26 ... Nov 24
Gearing up for coal would cost billions. CW p3 ... Dec 1
Insulation subsidies. B p17 ... Dec 1
Large wind turbine solar energy plants proposed,*. p14 ... Dec 8

Great Britain
North Sea oil platform flaw detection method sought. p15 ... Jul 7
Scotland's cable-stayed bridge is final link,*. p12 ... Jul 14
Studies favor tidal power dam, drawing, map. p24 ... Jul 14
England's cable-stayed twin rail bridge is a first for Europe,*. p13 ... Aug 11
British overseas workers getting new tax breaks. p25 ... Aug 18
Brick-clad concrete proves troublesome at London apt bldg. p10 ... Aug 25
Redesigned roof turns stresses inside out at Bradford, England sports center,**. p18 ... Aug 25
Britain offers U.S. insights into wage restraint problems. p57 ... Aug 25
London subway ties together airport, seven existing lines, map, drawing,**. p16 ... Sep 1
Prototype beam lifting rig saves $90,000 at South Wales viaduct,**. p38 ... Sep 8
Girders replace London's aging arch bridges,*. p17 ... Sep 15
Scotland's floating prestressed breakwater zigzags to beat waves,**. p12 ... Sep 29
Lift-slab viaduct is jacked up over a bog near Stafford, England, drawings,**. p60 ... Oct 6
British eye possible steel fraud, investigate corrosion problem. p20 ... Nov 10
Ninian oil platform deck repaired. B p20 ... Nov 10
Overseas work hits over $3 billion. p92 ... Nov 17
Energy, housing rehab big at British show, Interbuild. p14 ... Nov 24
Gearing up for coal would cost billions. CW p3 ... Dec 1
Construc faces nationalization threat. p54 ... Dec 1
England, Wales school rehab. B p19 ... Dec 8
British contractors demand changes on tax law. p54 ... Dec 15
Tent-like, precast pyramids linked to form ceiling for Chatham, England office bldg,**. p47 ... Dec 22
London Tower Bridge vibrations. B p56 ... Dec 22

Greece
Collapse of Athens office bldg probed. p15 ... Jul 28

Guatemala
Pueblo Viejo-Quixal hydro project. B p18 ... Sep 15

Hong Kong
Deep cutoff wall makes New World Centre site economic, drawing, map,**. p26 ... Jul 21
and RC p10 ... Nov 17
Typhoons not that super. RC p5 ... Sep 29
Dates set for subway extension. CW p3 ... Oct 20
Plans $4.2 billion transport scheme, map,*. p45 ... Nov 17

Hungary
Budapest subway builders fight soil, water, sewers, drawing, map,**. p24 ... Nov 24

India
World Bank loan for oil field develop. WO p7 ... Jul 14
Builds power network, Beas Project, map,**. p16 ... Jul 28
Indian breeder. B p17 ... Aug 11

Indonesia
Giffels seeks $10-billion development plan. CW p3 ... Oct 13

Iran
Port consultant correction. RC p8 ... Aug 4
Jap. satellite transmission cuts construc time for Tehran petrochemical complex. p12 ... Sep 15
Tehran awards first contract on transit system. p15 ... Sep 15
Land price fix. B p18 ... Sep 15
Starrett tops out high-rises in Farahzad new town,*. p17 ... Oct 27
Boosts nuclear power. CW p3 ... Nov 24
Tehran digs in on first leg of transit system. p15 ... Nov 24
French oversee rails B p19 ... Dec 8

Iraq
Billions for transp. B p50 ... Oct 6

Israel
Hydro power from Mediterranean-Dead Sea link. CW p3 ... Jul 28
Jerusalem: Old City renewal complex designed by Safdie, Weil,*. p19 ... Sep 15
Studies Mideast water-sharing plan, map. p12 ... Dec 8

Italy
Agreement promotes sale of Canadian reactors. p16 ... Dec 8

Japan
Nagoya Central Park shops and trains share subgrade site,*. p15 ... Jul 7
Slows hwy pace. B p17 ... Jul 7
Flexible support system solves rock woes at Nakayama Railway tunnel,**. p30 ... Jul 14
Traveling form slashes casting cycle for hwy viaduct,*. p14 ... Sep 8
Toy plane eases tough cable spanning job,*. p16 ... Sep 8
and RC p16 ... Oct 6
Satellite transmission cuts construc time for Tehran petrochemical complex. p12 ... Sep 15
Asphalt-cement mix, cold ascon, forms cutoff walls and membranes. p17 ... Sep 15

Steel pendulum may be quake protection,*. p15 ... Oct 27
Japan may store oil in offshore storage vessels. CW p3 ... Nov 3
Steel fiber, shotcrete mix works. p16 ... Nov 10
Japan, Inc.—for export. e p88 ... Nov 10
Fluidized bed cuts Tokyo incinerator ash, drawing. p19 ... Nov 17
Develops floating pile plant for Mideast construc,*. p14 ... Dec 1
Utility cools underground cable with water instead of oil. p17 ... Dec 1
Eyes energy conservation. B p19 ... Dec 8
Tapered tower may be limit of current slip-forming art, drawing,**. p62 ... Dec 22

Jordan
Jacobs contract for potash complex. B p29 ... Nov 17

Korea
Seoul transit canceled. B p17 ... Jul 7
Seoul subway back on track. p18 ... Oct 27
Tidal power. B p20 ... Nov 10

Lebanon
Beirut seeks $ billions in outside aid for reconstruction,**. p33 ... Aug 4
Rebuilding Beirut to mix old, new,*. p18 ... Nov 10

Mexico
Aqueduct challenges high sierra, map,**. Cover and p18 ... Aug 11
$1-billion Mexican gas link. B p25 ... Aug 18
Mexico City rail to cost $1.75-billion. p15 ... Sep 8
Pipeline builder buys from Alyeska. p42 ... Oct 6
Mexico City plans new hwys. B p20 ... Nov 10
Mexico City airport improvement. B p29 ... Nov 17
Canada eyes Mexican transit projects, map. p15 ... Dec 15

Nepal
Plans 3,600-Mw Karnali hydro. p15 ... Sep 1

The Netherlands
Dutch settle on last closure to guard delta from the North Sea, map, drawing,**. p18 ... Nov 3

Nicaragua
Managua quake recovery,*. RC p5 ... Oct 6

Norway
North Sea plow cuts trench in hard sea floor,*. p13 ... Jul 7

Pakistan
World Bank weighs petroleum reserves development. WO p7 ... Jul 14
Tarbela basin 4 to be flip bucket; generator fails,*. p12 ... Aug 4
and RC p5 ... Nov 10
Tarbela reservoir filled to the brim. CW p3 ... Sep 15
Major erosion hits Tarbela Dam again; earlier problems, drawings,**. p37 ... Sep 22
Another crash repair program begins at Tarbela Dam, drawing,*. p39 ... Oct 6
Tarbela Dam: new erosion problem solved. p15 ... Nov 17

Panama
Chances for new Panama Canal still appear dim. WO p7 ... Aug 4
Panama plans huge expansion if treaties are ratified. WO p7 ... Sep 15
and RC p10 ... Nov 17
Canal, lock expansion permitted under treaty. p21 ... Oct 13
Canal engineering lessons. RC p5 ... Oct 20

Peru
Spending big on irrigation, water supply, power. p20 ... Nov 10

Philippines
Puts hwy contracts on ice, map. p11 ... Dec 1

Portugal
Europe's deepest port, Sines industrial zone rise behind giant breakwater, drawing,**. Cover and p16 ... Aug 25
and RC p12 ... Dec 22

Qatar
Triangular hotel,*. p58 ... Dec 22

Saudi Arabia
Nuclear submarines proposed to push icebergs to parched areas. p14 ... Jul 7
Saudis seek Indian water. B p21 ... Jul 21
American-led team wins work on Saudi army city. p19 ... Aug 4
Saudis eye $4-billion desert rail line, map. p9 ... Aug 25
Ras al Mishab port pays $3-m bonus,*. p12 ... Aug 25
Port has record-size desalting plant. p12 ... Aug 25
DOT takes on hwys. p16 ... Sep 15
$500-m new town within Riyadh. CW p3 ... Sep 29
Fluor builds a Saudi Hq,*. p13 ... Sep 29
Saudis advised to ease contract terms, chart. p17 ... Oct 20
Water from icebergs. e p88 ... Oct 20
Saudis issue new rules on hiring labor. p54 ... Nov 3
Saudis team with U.S. for solar research project. CW p3 ... Nov 10
Glass, concrete triangles, roof Riyadh airport terminals,**. p15 ... Nov 17
Housing job near Damman. B p17 ... Nov 24
Pyramids, parabolas, cables form Saudi velodrome roof, drawing,*. p20 ... Nov 24
Easing Riyadh's traffic tie-ups. B p17 ... Dec 1
Colo. center will plan U.S.-Saudi solar program. p17 ... Dec 8
Japanese get Jubail desalter, generator award. B p56 ... Dec 22

South Africa
South African precaster vies for Northeast rail corridor minority contract. p13 ... Nov 3
I-R impact drill drives through hard rock fast. p14 ... Nov 3
Pollution. B p19 ... Dec 8

Sweden
Rock Store '77, Stockholm meeting, told underground storage saves energy. p16 ... Sep 29
and e p80 ... Oct 13
Landslide kills eight, destroys 67 homes,*. p11 ... Dec 8

Switzerland
Pumped storage project, Grimsel II East, picks up where dams leave off, drawing,**. p26 ... Oct 20

Taiwan
Damage in Taiwan typhoons. B p17 ... Aug 11

Thailand
To use fossil fuel, shelves A-plant generation. p14 ... Dec 8

Turkey
Plans $14-billion hwy program, map. p16 ... Jul 14
Decaying pontoons may sink Istanbul's Galata Bridge,**. p18 ... Aug 4
$5-billion hwy. B p50 ... Oct 6
Bid date set for second Bosporus Strait bridge. p14 ... Oct 13
Karakaya hydro project. B p17 ... Dec 1

USSR
Moscow-Paris, Moscow-Washington embassy swaps delayed. p13 ... Jul 7
Sayan's record powerhouse will spur Siberian development, map,**. Cover, p22 and e p82 ... Jul 21
U.S. to host fire safety sales group in Moscow. CW p3 ... Aug 4
Boguchany hydro on Angara River. B p17 ... Aug 11
Moscow Olympics building behind. p10 ... Sep 1
Pedestrian bridge collapses near Moscow. B p18 ... Sep 15
Nurek earthfill rises to a record, sets stage for higher Rogun Dam,**. Cover and p50 ... Sep 22
Nurek's reservoir creates a seismology lab, map. p53 ... Sep 22
Swedes teach Russians All-Betong on-site casting at Leningrad's Hotel Pribaltiskaya,**. p63 ... Sep 22
Russia to build its longest pipeline, map. p50 ... Oct 6
Germans rush Moscow airport terminal job,*. p13 ... Nov 3
Clear rules promised for U.S.-USSR energy project ventures. WO p7 ... Nov 24
Flood barrier will protect Leningrad from sea storms. p13 ... Dec 15

Venezuela
Brazilians get Guri dam expansion job. CW p3 ... Jul 7
$1.4-billion railroad pact signed. p14 ... Sep 29
Caracas expands transit plan. p16 ... Sep 29
NCA trade mission to check Venezuelan market. p58 ... Oct 13
A big construc market,*. p90 ... Nov 17

Yemen
Receives Saudi loan for electricity, water, roads. p13 ... Dec 15
Wants one contractor for 1,500-mile hwy. B p56 ... Dec 22

Yugoslavia
Invites westerners to bid on transmission network. B p56 ... Dec 22

IRRIGATION
Irrigation and hydro cost indexes for the West, BuRec. p126 ... Sep 22
BuRec Dakotas project jeopardized. p9 ... Oct 20
Peru studies irrigation of Majes and Sihuas pampas. p20 ... Nov 10
Israel studies Mideast water-sharing plan, map. p12 ... Dec 8
Conserving irrigation water is aim of interagency study. p40 ... Dec 22

J

JACKING
Basketball spurs San Antonio sports arena to new roof height,**. p55 ... Oct 6
Pa. State U. stadium expansion boosts stands and fans 12.5 ft, drawing,*. p58 ... Oct 6
Chicago's oldest house jumps elevated transit tracks,**. p10 ... Dec 15

JOINTS, see: BEAMS, FRAMES

L

LABOR
DOT eases no-strike labor pact policy. p14 ... Jul 7
50 Calif. groups seek to curb force account work. p55 ... Jul 7
Calif. attack on force account work. CW p3 ... Jul 14
Construc unemployment declines slightly. CW p3 ... Jul 14
Labor Dept plans construc unit,*. p11 and e p80 ... Jul 14
Carter backs labor law reform. p13 ... Jul 21
Worker safety under study; new probe threatens OSHA. p13 ... Jul 21
New single-voice talks continue. p68 ... Jul 21
Diving safety rules surface. CW p3 ... Jul 28
Fla. project agreement puts lid on chemical complex wage increases. CW p3 ... Jul 28
Chicago committee (CCCC) paves way for others. p57 ... Jul 28
Marshall says Carter backs OSHA; unveils paper work reduction plan,*. p59 ... Jul 28
Hearings under way on labor bill. p60 ... Jul 28
AFL-CIO, AGC trade volleys on labor reform. CW p3 ... Aug 4
SBA Act: new set-asides for pockets of unemployment. CW p3 ... Aug 4
Court halts Calif. city's force account program. p58 ... Aug 4
Employment in construc picking up. CW p3 ... Aug 11
OSHA: it's bad, but what's better? e p64 ... Aug 11
Single voice on labor is formed (NCEC),*. p11 and e p72 ... Aug 18 Aug 25
Labor Dept reassures NCIC on construc committee aims,*. p14 ... Aug 18
Labor-management teamwork pays off in St. Louis. p85 ... Aug 18
When will Commerce form Office of Construc? e p98 ... Aug 18
OMB's Lance endorses idea of Federal Office of Construc. p12 ... Aug 25
OSHA offers states 90% funding for safety consultations. p14 ... Aug 25
New panel wrestles with problems of unemployment data. WO p7 ... Sep 1
Egypt swaps workers for currency,**. p25 ... Sep 1
and RC p6 ... Dec 15
Congress deluged by labor law bills, list. p55 and e p70 ... Sep 1
Construc joblessness down in August. CW p3 ... Sep 8
CCE board rejects single-voice proposal (NCEC),**. p10 ... Sep 8
OSHA walk-around pay policy expected to be challenged. p12 ... Sep 8
Nominee to OSHA review panel may bring pro-labor tilt. WO p7 ... Sep 15
AGC, ABC, NAHM attack labor law reform bill,**. p57 ... Sep 15
NCEC Chicago meeting still on; list of members. p60 ... Sep 15
Quebec employers fight proposed antiscab law. p62 ... Sep 15
Full employment measure may pass as a tribute to Sen. Humphrey. WO p7 ... Sep 22
Architect not in construc, says OSHA. p39 ... Sep 22
ABC chapter seeks showdown on Baltimore agreement. p42 ... Sep 22
Labor shortages: growing, but scattered, table. p193 ... Sep 22
Labor law bill wins first round,*. p49 ... Sep 29
17 groups meet to discuss a single voice on labor (NCEC). p42 ... Oct 6
Labor law reform battle heats up. p48 ... Oct 6
Supreme Court to rule on construc cases this term. p134 ... Oct 6
Ohio contractor settles OSHA discrimination case. p137 ... Oct 6
Unemployment in construc slides to 10.4%. CW p3 ... Oct 13
OSHA speeds curbs on carcinogens. p15 ... Oct 13
Unions win House victory on labor law,*. p57 and e p80 ... Oct 13
No-strike pact doesn't bar sympathy actions (Kan.). p58 ... Oct 13
Industry pension plans in danger. p75 ... Oct 20
NIOSH: worker exposure to asphalt should be limited. p76 ... Oct 20
Principals report progress in single-voice effort (NCEC). p76 ... Oct 20
Georgine attacks Roundtable at ASCE meeting. p17 ... Oct 27
Industry opposition tested in labor law reform battle. p57 ... Oct 27
OSHA 'walk-around' pay may be challenged. p58 ... Oct 27
Commerce again promises construc listening post. WO p7 ... Nov 3
Construc unemployment makes big jump. CW p3 ... Nov 10
U.S. quits ILO. p63 ... Nov 10
A single voice is being heard (NCIC). e p88 ... Nov 10
Construc, business allies differ on labor reform strategy. WO p7 ... Nov 17
Roundtable report on special labor agreements. p89 ... Nov 17
and e p72 ... Dec 1
Full-employment bill gets Carter nod. p16 ... Nov 24
Single-voice industry group, NCEC, may be formed by Christmas,**. p57 ... Nov 24
Calif. safety program results: injuries drop 26%. p59 ... Nov 24
Minority contracting: where it all stands. e p80 ... Nov 24
and e p80 ... Dec 8
Carter backs force account rules,*. p10 ... Dec 1
It's time for management to pull together. e p72 ... Dec 1
Construc unemployment drops to 11.3%. CW p3 ... Dec 8
NCEC plans Jan. organization. p57 ... Dec 8
OSHA inspectors must make walk-around pay rule known. p59 ... Dec 8
OSHA will drop a number of 'nit-picking' standards,*. p55 ... Dec 15
Court says OSHA doesn't protect workers who refuse dangerous jobs. p56 ... Dec 15
Minority set-asides. RCs p17 ... Dec 22
Job needs keep lid on pay demands. p82 ... Dec 22
Lack of work curbs labor shortages, table. p174 ... Dec 22
AGC, ABC urge labor to compete by reform. p176 ... Dec 22

• Boycotts, Pickets, Strikes
Publicity need no excuse for illegal picketing, says NLRB (Miss.). p59 ... Aug 4
Denver: No-strike transit pact. p84 ... Aug 18
Hawaiian ironworkers call strike; work at standstill. p84 ... Sep 8
NLRB: Colo. picketing intended to force top-down organizing. p60 ... Sep 15
Sympathy strike results in San Fran pollution fine. CW p3 ... Sep 29
NLRB: 'reserved gate no bar to situs picketing

(Ariz.). p49 ... Sep 29
Altemose fights to keep picketing ban,*. p43 ... Oct 6
NLRB unmasks illegal picketing (N.Y. Teamsters). p55 ... Dec 1
N.Y. State striker benefit law upheld by appellate court. p56 ... Dec 1
NLRB says jurisdictional dispute led to illegal secondary strike (NYC Teamsters). p16 ... Dec 8
NLRB says publicity picketing was not a boycott (N.J. carpenters). p60 ... Dec 8
Bldg trades may picket hospitals without notice. p175 ... Dec 22
A $2.35 wage increase ends Hawaiian ironworker strike. p176 ... Dec 22

• Briefs
p55 Jul 7/p 59 Aug 4/p50 Aug 11/p178 Dec 22

• Hiring; Wages; Contracts & Bargaining
IRS again delays ruling on taxing travel pay. p55 ... Jul 7
Contractors should hire alcoholics, addicts. CW p3 ... Jul 14
and RC p5 ... Aug 11
Don't condemn hometown plans. RC p5 ... Jul 14
Job Banks bulletin points out occupations in demand, table. p57 ... Jul 14
Labor Dept to issue new hiring rules. CW p3 ... Jul 21
Bldg trades list minority gains,*. p17 ... Jul 21
Recession, open shop temper wage pacts,*. p67 and e p82 ... Jul 21
Fla. project agreement puts lid on chemical complex wage increases. CW p3 ... Jul 28
HUD scraps low-wage rehab program. WO p7 ... Jul 28
Labor Dept eyes female hiring goal. p60 ... Jul 28
Handicapped charges filed against three companies. p60 ... Jul 28
Hometown plans slated to go in Labor Dept anti-bias drive,**. p11 ... Aug 4
Norton sets new course for EEOC. p15 ... Aug 4
'77 construc bargaining posts sober wage gains. p58 ... Aug 4
Labor-management teamwork pays off in St. Louis. p85 ... Aug 18
Labor Dept sets hiring goals, rules for women, minorities. p8 ... Aug 25
Britain offers U.S. insights into wage restraint problems. p57 ... Aug 25
Brooklyn, N.Y. Davis-Bacon violator pays $110,000. p57 ... Aug 25
Dallas: 'Pregnant' hardhat fights for his job. p57 ... Aug 25
Phila subcontractor debarred for not meeting hiring goals on New Haven hospital job. p11 ... Sep 1
Bechtel sued for overtime on Alaska pipeline work. p15 ... Sep 1
Union wages and benefits up 6.7% over last year, tables. p56 ... Sep 1
Payroll padding charged on S.C. Parr nuclear plant job. CW p3 ... Sep 8
Guam alien labor issue stalls work. p86 ... Sep 8
N.Y. court overturns state minority hiring order. p15 ... Sep 15
D.C. insists on residents for public works projects. p16 ... Sep 15
Job Banks post high demand for carpenters, laborers. p16 ... Sep 15
Calif. surveyors win decision on prevailing wage rate issue. p60 ... Sep 15
Bakke reverse bias suit nears Supreme Court hearing. p42 and e p206 ... Sep 22
Construc wage hikes slacken. p73 ... Sep 22
Wage increases averaging 73 cents an hour. CW p3 ... Sep 29
Minorities step up pressure for jobs, contracts. WO p7 ... Sep 29
Govt sets wage rates for Guam construc work. p50 ... Sep 29
N.J. contractors ask unions for voluntary wage freeze. p44 ... Oct 6
New travel tax rules expected. p135 ... Oct 6
Compromise struck on minimum wage bill. CW p3 ... Oct 20
Multiple suits challenge validity of minority quotas,**. p73 ... Oct 20
Pa. hwy cutbacks cause non-construc jobs loss. CW p3 ... Oct 27
Anti-bias compliance is changed. p58 ... Oct 27
Controversial tax changes may be postponed. CW p3 ... Nov 3
Construc groups zero in on proposed female quotas,**. p8 ... Nov 3
'Sleeping' worker gets jobless pay (Calif.). p54 ... Nov 3
Saudis issue new rules on hiring labor. p54 ... Nov 3
Median wage boost is 50 cents. p63 ... Nov 10
Court won't rule on sheetmetal plan. p63 ... Nov 10
HUD gears up for bigger Davis-Bacon enforcement program. WO p7 ... Nov 24
NYC bricklayers take wage cut. p58 ... Nov 24
Phila masonry contractor reinstated for federal work. CW p3 ... Dec 1
Rate of wage escalation still declining, table. p53 and e p72 ... Dec 1
Minority hiring: 20% goal for Atlantic City casinos. p55 ... Dec 1
Western wages run high. p56 ... Dec 1
N.Y. state striker benefit law upheld by appellate court. p56 ... Dec 1
Some affirmative action hiring plans may be illegal. WO p7 ... Dec 8
Va. fights I-66 Davis-Bacon rates. p16 and e p80 ... Dec 8
Supreme Court rules on pregnant workers' rights. p14 ... Dec 15
Davis-Bacon crackdown under way,*. p53 ... Dec 15
NLRB hits Tex. boilermakers on hiring hall. p56 ... Dec 15
OFCCP free to set contract terms (La.) p175 ... Dec 22
A $2.35 wage increase ends Hawaiian ironworker strike. p176 ... Dec 22
Supreme Court ruling may clarify antibias law compliance (Chicago). p178 ... Dec 22

• NLRB; Jurisdictional Disputes
Calif. multiemployer unit loses recognition bid. p68 ... Jul 21
Publicity need no excuse for illegal picketing, says NLRB (Miss.). p59 ... Aug 4
NLRB again approves Kiewit's double-breasted operations. p84 ... Aug 18
ASA files "reverse discrimination" brief. CW p3 ... Sep 1
Phila subcontractor debarred for not meeting hiring goals on New Haven hospital job. p11 ... Sep 1
Court OKs East Coast offshore oil drilling. p12 ... Sep 1
and e p98 ... Sep 8
Colorado R. pollution suit seeks EPA control of salinity. p13 ... Sep 1
Bechtel sued for overtime on Alaska pipeline work. p15 ... Sep 1
Rare species hits TVA's Columbia Dam. p15 ... Sep 1
Perini case heads for trial; disputes minority set-aside on Boston South Cove tunnel job. p12 ... Sep 8
NLRB hikes its interest rate on back pay (Fla.). p84 ... Sep 8
Colo. picketing intended to force top-down organizing. p60 ... Sep 15
Reserved gate no bar to situs picketing (Ariz.). p49 ... Sep 29
New appeals procedure set up for jurisdictional disputes. p51 ... Sep 29
Me. contractor illegally dumped union. p51 ... Sep 29
No-strike pact doesn't bar sympathy actions (Kan.). p58 ... Oct 13
Prehire contracts are a one-shot deal (Kan.). p62 and e p88 ... Nov 10
and RC p14 ... Dec 22
NLRB approves another double-breasted operation (Mich.). p90 and e p112 ... Nov 17
Racial bias won't be considered in jurisdictional dispute cases. p91 ... Nov 17
NLRB: union can't discipline boss (Wash.). p92 ... Nov 17
Supreme Court allows NLRB to award attorney fees (Fla.). p57 ... Nov 24
NLRB unmasks illegal picketing (N.Y. Teamsters). p55 ... Dec 1
NLRB says jurisdictional dispute led to illegal secondary strike (NYC Teamsters). p16 ... Dec 8
NLRB says publicity picketing was not a boycott (N.J. carpenters). p60 ... Dec 8
Daniel effort to block union drive at S.C. power project draws NLRB fire. p53 ... Dec 15
NLRB hits Tex. boilermakers on hiring hall. p56 ... Dec 15
NLRB halts NYC teamsters' top-down organizing. p174 ... Dec 22
Ore. AGC-labor contracts enjoined. p175 ... Dec 22

• Regional Bargaining; Multi-employer Bargaining
Calif. multiemployer unit loses recognition bid (NLRB). p68 ... Jul 21
Houston industrial agreement is dead. p49 ... Aug 11

• Unions
New UA, NCA nat'l labor agreement. CW p3 ... Jul 21
Bldg trades list minority gains,*. p17 ... Jul 21
Recession, open shop temper wage pacts,*. p67 and e p82 ... Jul 21
New NCA-UA labor contract faces up to open shop,**. p58 ... Jul 28
Ironworker trainee program available to older workers. p58 ... Jul 28
Marine training programs now offer civilian credit. p60 ... Jul 28
AFL-CIO, AGC trade volleys on labor reform. CW p3 ... Aug 4
Union dues and fees vary, some used as control tools. p58 ... Aug 4
Fla. unions cooperate in curbing project costs. p59 ... Aug 4
Union wounds self-inflicted, says AGC's Sprouse. CW p3 ... Aug 11
NCA sues NECA, IBEW over big electrical industry fund. p14 ... Aug 11
and e p98 ... Sep 8
Houston industrial agreement is dead. p49 ... Aug 11
New elevator pact aims at higher productivity. p50 ... Aug 11
McKee may buy Tulsa open shop company. p16 ... Aug 18
NLRB again approves Kiewit's double-breasted operations. p84 ... Aug 18
Denver: No-strike transit pact. p84 ... Aug 18
NECA will fight NCA on industry fund. p85 ... Aug 18
Hawaiian ironworkers call strike; work at standstill. p84 ... Sep 8
Georgine's Labor Day talk: who are our friends? p84 ... Sep 8
Anchorage union dispute stalls hotel work. p15 ... Sep 15
Union membership has fallen 4% in past two years,*. p58 ... Sep 15
and RC p14 ... Dec 22
Ala. must consider open shop rates. p58 ... Sep 15
NLRB: Colo. picketing intended to force top-down organizing. p60 ... Sep 15
Quebec employers fight proposed antiscab law. p62 ... Sep 15
Sympathy strike results in San Fran pollution fine. CW p3 ... Sep 29
Me. contractor illegally dumped union. p51 ... Sep 29
Teamsters eye education fund. p52 ... Sep 29
Altemose fights to keep picketing ban,*. p43 ... Oct 6
N.J. contractors ask unions for voluntary wage freeze. p44 ... Oct 6
Supreme Court to rule on construc cases this term. p134 ... Oct 6
Seattle trades try to recover housing work. p135 ... Oct 6
Embezzler loses job as Fla. union pension trustee. CW p3 ... Oct 13
Unions win House victory on labor law,*. p57 and e p80 ... Oct 13
Georgine attacks Roundtable at ASCE meeting. p17 ... Oct 27
Open shop construc growing bigger, charts, table,**. Cover, p20 and e p80 ... Oct 27
Electrical fund challenged again. p57 ... Oct 27
Construc groups zero in on proposed female quotas,**. p8 ... Nov 3
ABC hits minority quotas; releases new member survey,*. p53 ... Nov 3
Prehire contracts are a one-shot deal (Kan.). p62 and e p88 ... Nov 10
and RC p14 ... Dec 22
Court won't rule on sheetmetal plan. p63 ... Nov 10
IBEW countersues NCA over industry fund. CW p3 ... Nov 17
NLRB approves another double-breasted operation (Mich.). p90 and e p112 ... Nov 17
Racial bias won't be considered in jurisdictional dispute cases. p91 ... Nov 17
NLRB: union can't discipline boss (Wash.). p92 ... Nov 17
Union violence would again be outlawed under a new bill. p92 ... Nov 17
Supreme Court allows NLRB to award attorney fees (Fla.). p57 ... Nov 24
NYC bricklayers cut labor costs by 20%. p58 ... Nov 24
NLRB unmasks illegal picketing (N.Y. Teamsters). p55 ... Dec 1
NECA, IBEW defend their industry fund. p56 ... Dec 1
Bldg Trades launch organizing drive,**. p8 and e p80 ... Dec 8
PRIDE program boosts construc in St. Louis,*. p59 ... Dec 8
AFL-CIO calls for more public works programs. CW p3 ... Dec 15
Daniel effort to block union drive at S.C. power project draws NLRB fire. p53 ... Dec 15
Dallas, Fort Worth plumbers sign early, demand little. p54 ... Dec 15
NLRB hits Tex. boilermakers on hiring hall. p56 ... Dec 15
Bldg trades join AFL-CIO battle for protectionism. WO p7 ... Dec 22
NLRB halts NYC teamsters' top-down organizing. p174 ... Dec 22
Bldg trades may picket hospitals without notice. p175 ... Dec 22
Ore. AGC-labor contracts enjoined. p175 ... Dec 22
AGC, ABC urge labor to compete by reform. p176 ... Dec 22
A $2.35 wage increase ends Hawaiian ironworker strike. p176 ... Dec 22

• Violence
Union violence would again be outlawed under a new bill. p92 ... Nov 17

LAKES
Ford to pay Mich. $1.6-m for pollution. CW p3 ... Jul 21
U.S. behind in program to clean up Great Lakes. p13 ... Jul 28
Ill. suit forces faster Milwaukee wastewater cleanup. p11 ... Aug 11
Court gives Lake Tahoe area planners legal immunity. p14 ... Aug 25
Ill., Milwaukee clash on plant cleanup. p14 ... Sep 29
Milwaukee agrees to Lake Michigan water cleanup. CW p3 ... Nov 17

LAND CLEARING, LANDSCAPING, see: LAND DEVELOPMENT

LAND DEVELOPMENT, LAND USE see also: ZONING, CITIES, PLANNING
Court gives Lake Tahoe area planners legal immunity. p14 ... Aug 25
Iran land price fix. B p18 ... Sep 15
House buries coastal zone legislation. CW p3 ... Nov 3
ASCE Viewpoint: Let's not deep-freeze so much of Alaska, map. p24 ... Dec 8

LANDSLIDES, see: EARTHQUAKES

LASER
Calif.: precision space frame trains lasers on target for fusion power test (Shiva),**. p28 ... Oct 20

LEASE PURCHASE, see: BUILDINGS • Federal

LEGAL DECISIONS (Simon)
Contractor wins right to salvage, Appeal of Hensel Phelps Construction Co., Inc. p50 ... Aug 18
Excusable delay clause bars damage suit, Loughman Cabinet Co. v. C. Iber & Sons, Inc. p50 ... Aug 18
Qualified privilege: architect may advise owner to reject a subcontractor, Kecko Piping Co., Inc. v. Town of Monroe. p92 ... Oct 6
Court OK's arbitration award despite admitted misconduct, Jean A. McCoy & Sons, Inc. v. La-Salle County. p96 ... Oct 6
Owner may correct errors in bid, says Iowa court, Lametti & Sons, Inc. v. City of Davenport, Iowa. p98 ... Oct 6
Owner liable for undisclosed data, Earl L. Reamer Co. v. City of Swartz Creek. p31 ... Nov 10
Court defines 'turnkey' responsibility, Mobile Housing Environments v. Barton and Barton. p31 ... Nov 10
Total liability disclaimer fails, J.A. Jones Construction Co. v. City of Dover. p40 KO ... Dec 8
Owner pays for joint delay, orders court, Appeal of Weitz Company, Inc. p40 KO ... Dec 8
One-year repair proviso doesn't block later suit, Baker-Crow Const. Co., v. Hames Electric. p115 ... Dec 22
N.Y. arbitration proceedings can be forceably consolidated, County of Sullivan v. Edward L. Nezelek, Inc. p115 ... Dec 22

LEGAL DEVELOPMENTS see also: CONGRESS; FEDERAL ISSUES
Supreme Court clears way for A-Es to advertise,*. p8 and e p74 ... Jul 7

Mich. high court okays Detroit arena. B p17 ... Jul 7
Equip thefts valued at $200-m per year by AGC, AED. B p17 ... Jul 7
Land condemnation for Richard B. Russell dam protested. B p17 ... Jul 7
Calif. attack on force account work. CW p3 ... Jul 14
MARTA subcontractor jailed. B p17 ... Jul 14
Ford to pay Mich. $1.6-m for pollution. CW p3 ... Jul 21
Suspended architect sues AIA. CW p3 ... Jul 28
U.S. agencies should sue A-Es more often, GAO report says. p10 ... Jul 28
and RC p10 ... Sep 22
and RC p5 ... Oct 20
Knoxville adopts new ABA procurement code. p10 ... Jul 28
and RC p5 ... Aug 18
EPA, states sue TVA on emissions. p14 ... Jul 28
BART wins $15-m cash settlement. p 14 and e p 72 ... Jul 28
and RC p28 ... Sep 22
and RC p5 ... Oct 13
Settlement of Indian claims could move Me. building. p15 ... Jul 28
Handicapped charges filed against three companies. p60 ... Jul 28
DOJ leads in case against ASCE. CW p3 ... Aug 4
Engineering board examiners quizzed about bidding bans. WO p7 ... Aug 4
Intervenors must pay court costs, (FPC). p18 ... Aug 4
Court halts Calif. city's force account program. p58 ... Aug 4
Courtroom mercenaries. e p80 ... Aug 4
and RCs p9 ... Oct 27
Court finds ASCE guilty of violating consent decree,**. p10 and e p64 ... Aug 11
and RC p5 ... Sep 15
Ill. suit forces faster Milwaukee wastewater cleanup. p11 ... Aug 11
NCA sues NECA, IBEW over big electrical industry fund. p14 ... Aug 11
and e p98 ... Sep 8
Mass.: Middlesex courthouse $16-m price tag tripled,*. p25 ... Aug 11
Houston industrial agreement is dead. p49 ... Aug 11
Federal subsidy of intervenors in suits opposed. e p64 ... Aug 11
Coal slurry churns up lawsuits. CW p3 ... Aug 18
Key N.Y. cooling tower battle brewing. p12 ... Aug 18
MBTA minority set-aside KO's low bid for Boston's South Cove tunnel. p15 ... Aug 18
L.A. ordered to comply with ocean sludge disposal schedule. p20 ... Aug 18
NECA will fight NCA on industry fund. p85 ... Aug 18
Antitrust suit charges Pa. roadwork monopoly. p85 ... Aug 18
A win for coal slurry. CW p3 ... Aug 25
ABC's Hogan concedes Korean contrib. CW p3 ... Aug 25
EPA sues L.A. over Hyperion plant modification delay. CW p3 ... Aug 25
Court denies Va. I-66 injunction. CW p3 ... Aug 25
Antitrust suit: Ohio eng societies charged with trade restraint. p13 ... Aug 25
Court gives Lake Tahoe area planners legal immunity. p14 ... Aug 25
ASA files "reverse discrimination" brief CW p3 ... Sep 1
Phila subcontractor debarred for not meeting hiring goals on New Haven hospital job. p11 ... Sep 1
Court OKs East Coast offshore oil drilling. p12 ... Sep 1
and e p98 ... Sep 8
Colorado R. pollution suit seeks EPA control of salinity. p13 ... Sep 1
Bechtel sued for overtime on Alaska pipeline work. p15 ... Sep 1
Rare species hits TVA's Columbia Dam. p15 ... Sep 1
Perini case heads for trial; disputes minority set-aside on Boston South Cove tunnel job. p12 ... Sep 8
Guam alien labor issue stalls work. p86 ... Sep 8
Rare mussel below Columbia Dam another endangered species. CW p3 ... Sep 15
Small towns challenge EDA public works grants. CW p3 ... Sep 15
ACEC plans preemptive action on ABA procurement code. WO p7 ... Sep 15
U.S. sues over Phila's sinking courthouse/office bldg,*. p11 ... Sep 15
Tex. overrules landmark law, three Dallas bldgs felled,*. p15 ... Sep 15
Me. Indian land claims stir fears about loans. p17 ... Sep 15
L.A. challenges tax-increment financing of urban redevelopment projects. p19 ... Sep 15
Ala. must consider open shop rates. p58 ... Sep 15
Calif. surveyors win decision on prevailing wage rate issue. p60 ... Sep 15
R.I. court strikes down hoisting engineer licensing test. p62 ... Sep 15
Quebec employers fight proposed antiscab law. p62 ... Sep 15
AGC may sue on public works minority issue. CW p3 ... Sep 22
Corps asks construc exemption from premerger notification rules. WO p7 ... Sep 22
Bakke reverse bias suit nears Supreme Court hearing. p42 and e p206 ... Sep 22
ABC chapter seeks showdown on Baltimore agreement. p42 ... Sep 22
N.J. eng pleads guilty to sewerage design fraud. p44 ... Sep 22
Judge refuses to stop progress on Phila rail tunnel. p46 ... Sep 22
Phila bars payment of airport work extras. p48 ... Sep 22
Sympathy strike results in San Fran pollution fine. CW p3 ... Sep 29
Minority contracting: AGC set to challenge public works law. p8 and e p64 ... Sep 29
and RC p11 ... Oct 6
and RCs p9 ... Nov 17
and RC p4 ... Dec 8
Report links Ky. club fire, lack of code enforcement,*. p11 and e p64 ... Sep 29
Ill., Milwaukee clash on plant cleanup. p14 ... Sep 29
Ohio's Kent State U. builds gym. B p16 ... Sep 29
D.C.-Md. agree to end sewer ban, sue EPA. B p16 ... Sep 29
Pa. contractors file public works minority suit. p51 ... Sep 29
Me. contractor illegally dumped union. p51 ... Sep 29
NSPE case goes to U.S. Supreme Court. CW p3 ... Oct 6
GSA's faulty foundations a problem; list of bldgs,**. p37 ... Oct 6
and RC p10 ... Nov 17
and RC p4 ... Dec 1
and RC p4 ... Dec 8
Private minority set-aside agreements may be illegal (Baltimore). p43 ... Oct 6
Altemose fights to keep picketing ban,*. p43 ... Oct 6
1974 Miami office collapse damages ring up millions. p44 ... Oct 6
Report alleges HUD housing fraud in razed Atlanta complex,*. p46 ... Oct 6
Former Del. official pays $50,000 in settlement. p48 ... Oct 6
Supreme Court to rule on construc cases this term. p134 ... Oct 6
ACEC seeks better image to fight price competition,*. p135 ... Oct 6
Proposed OMB rules spell disclosure and paper work. p136 ... Oct 6
Embezzler loses job as Fla. union pension trustee. CW p3 ... Oct 13
DOJ investigation reveals North Anna, Va. A-plant fault data mishandled,*. p12 ... Oct 13
Grand jury finds Seattle eng guilty in bridge testimony. p13 ... Oct 20
Multiple suits challenge validity of minority quotas,**. p73 ... Oct 20
Fairfax County, Va. design-build contracts attacked. p76 ... Oct 20
Conflict of interest seen in Fla. zoo contract. p76 ... Oct 20
Eng cleared of conflict of interest in Fla. zoo contract. CW p3 ... Oct 27
Foundation woes a chronic GSA problem,*. p10 and e p80 ... Oct 27
Mont., Ind. AGC locals tear into set-asides. p12 ... Oct 27
ASCE may ask for change in 1972 antitrust consent decree. p13 and e p80 ... Oct 27
Calif. A-plant safety laws called unconstitutional. p14 ... Oct 27
Decision killing N.Y. State bond proposition appealed. p17 ... Oct 27
Electrical fund challenged again. p57 ... Oct 27
Fla. material suppliers sentenced for price fixing. p58 ... Oct 27
CPSC safety suit questions old aluminum wiring. p9 ... Nov 3
'Sleeping' worker gets jobless pay (Calif.). p54 ... Nov 3
Phila., Fla. AGC chapters file minority set-aside suits. p54 ... Nov 3
AGC continues legal onslaught against minority set-asides,*. p11 ... Nov 10
Chicago hwy contractors guilty of bid-rigging, fraud. p15 ... Nov 10
Congress nears completion of overseas bribery bill. p17 ... Nov 10
British eye possible steel fraud. p20 ... Nov 10
Baltimore, Revere, Mass. contractors, city officials convicted for bid-rigging. p63 ... Nov 10
Court won't rule on sheetmetal plan. p63 ... Nov 10
Milwaukee agrees to Lake Michigan water cleanup. CW p3 ... Nov 17
IBEW countersues NCA over industry fund. CW p3 ... Nov 17
ENR conf: claims abroad present extra risk. p16 ... Nov 17
Five convicted for Chicago MSD sludge hauling bribes. p18 ... Nov 17
D.C.'s Georgetown cleared for high-rise development. p24 ... Nov 17
Phila commuter rail tunnel opponents back in court. B p29 ... Nov 17
Nuclear plant liability questioned. B p29 ... Nov 17
AGC scores points, but no win, in Mont. p89 ... Nov 17
NUCA issues own minority set-aside policy. p89 ... Nov 17
and p10 ... Nov 24
Supreme Court action makes owners liable for safety (Nev.). p91 ... Nov 17
Former Seattle city eng sentenced for perjury. CW p3 ... Nov 24
McDermott reports "questionable payments." CW p3 ... Nov 24
High court to decide on Endangered Species Act. p15 ... Nov 24
Supreme Court allows NLRB to award attorney fees (Fla.). p57 ... Nov 24
Phila masonry contractor reinstated for federal work. CW p3 ... Dec 1
How to discourage lawsuits. RC p4 ... Dec 1
TVA alleges uranium conspiracy. p10 ... Dec 1
Court upholds CM extortion convictions of two former Mass. state senators. p11 ... Dec 1
Demolition contractors fined for S.C. office bldg's collapse. p13 ... Dec 1
El Paso performing arts center suit increased to $10-m by contractor. p13 ... Dec 1
TVA scrubs air cleanup fight. p14 ... Dec 1
Grand jury probes Brown & Root marine activities. B p17 ... Dec 1
NECA, IBEW defend their industry fund. p56 ... Dec 1
N.Y. state striker benefit law upheld by appellate court. p56 ... Dec 1
A second conviction on Seattle project never built. CW p3 ... Dec 8
NCIC, Commerce meet on minority contracting issue. WO p7 ... Dec 8
Courts may insist on arbitration in contract disputes. WO p7 ... Dec 8
Some affirmative action hiring plans may be illegal. WO p7 ... Dec 8
EPA exacts stiff agreement, record pollution fine from Memphis. p11 ... Dec 8
Mass., R.I. asphalt firms charged with antitrust violations. p15 ... Dec 8
High court takes up N.J. ban on out of state waste dumping. p17 ... Dec 8
Mich. court okays sharing hwy wealth. B p19 ... Dec 8
Minority contractors protest AGC suits,**. p57 ... Dec 8
Supreme Court will rule on western water fight. p14 ... Dec 15
Supreme Court rules on Toledo low-income housing decision. p14 ... Dec 15
Supreme Court to rule on NYC Grand Central Terminal landmark status. p14 ... Dec 15
Supreme Court rules on pregnant workers' rights. p14 ... Dec 15
Arbitrators study way to avoid environmental suits. p17 ... Dec 15
Carter gets bill banning foreign bribery,*. p17 ... Dec 15
Iowa engineers settle antitrust suit. p55 ... Dec 15
Court says OSHA doesn't protect workers who refuse dangerous jobs. p56 ... Dec 15
Vt. contractor gets relief from set-aside requirement. CW p3 ... Dec 22
Toll boost on Chicago's ailing Calumet Skyway may swell maintenance fund. p43 ... Dec 22
Design change in N.H. ends 20-year I-state battle. p44 ... Dec 22
S.C. may sue Savannah R. plant for air pollution violations. p44 ... Dec 22
Chicago MSD bribery convictions bring stiff sentences. p45 ... Dec 22
Bldg trades may picket hospitals without notice. p175 ... Dec 22
Ore. AGC-labor contracts enjoined. p175 ... Dec 22
OFCCP free to set contract terms (La.). p175 ... Dec 22
Supreme Court ruling may clarify antibias law compliance (Chicago). p178 ... Dec 22

LOCKS see also: DAMS; RIVERS

Panama Canal, lock expansion permitted under treaty. p21 ... Oct 13
Panama engineering lessons. RC p5 ... Oct 20
House, Senate to battle over user tax for waterways (Alton, Ill. L&D 26),*. p10 ... Oct 20
Bonneville lock expansion. B p17 ... Nov 24
Small powerplant pacesetter at Racine Locks and Dam,*. p11 ... Dec 8
La.'s Red River waterway gets under way. p11 ... Dec 15

LUMBER

COWPS to study lumber prices. p15 ... Sep 1
Record wooden structure, N.M.'s Trestle Project at Kirkland AFB, to test atomic blast effects, drawing,**. Cover and p18 ... Sep 29
NAHB asks Congress to probe lumber prices. p58 ... Oct 13
Steel, lumber prices in Capitol spotlight. p13 ... Oct 27

M

MANAGEMENT & PRODUCTIVITY see also: SPECIFICATIONS & STANDARDS; BUILDING DESIGN • Prefabs & Systems; PLANNING

Big San Fran sewer CM job let. CW p3 ... Jul 14
Risks kill Md.'s in-house CM plan for Baltimore transit. p11 ... Jul 14
Govt eyes 1980 Olympics CM bill. p14 ... Jul 14
Parsons takes Baltimore subway CM contract. CW p3 ... Aug 11
New elevator pact aims at higher productivity. p50 ... Aug 11
Fluor to design, manage La. LOOP marine work. CW p3 ... Sep 8
Fast-tracking at Leningrad's Pribaltiskaya Hotel,**. p63 ... Sep 22
NSF workshop on productivity in construc. CW p3 ... Oct 13
WMATA renews Bechtel's CM contract. p10 ... Dec 1
Fast-tracking speeds San Fran's North Point Pier redevelopment,**. p63 ... Dec 22

MASS TRANSIT

Bay Area Rapid Transit District job—see: CITIES, San Francisco.

Southern California Rapid Transit District job —see: CITIES, Los Angeles.

Metropolitan Atlanta Rapid Transit Authority —see: CITIES, Atlanta.

DOT eases no-strike labor pact policy. p14 ... Jul 7
Cairo mass transit extension may be delayed. B p17 ... Jul 7
Seoul transit canceled. B p17 ... Jul 7
Risks kill Md.'s in-house CM plan for Baltimore transit. p11 ... Jul 14
Gasoline tax for transit, energy R&D. WO p7 ... Jul 28
Reducing blackout problems. e p72 ... Jul 28
Parsons takes Baltimore subway CM contract. CW p3 ... Aug 11
FHWA clears higher NYC area tolls to help finance mass transit. p15 ... Aug 18
Denver: No-strike transit pact. p84 ... Aug 18
Water floods D.C. Metro as three seals fail. p13 ... Sep 1
London subway ties together airport, seven existing lines, map, drawing,**. p16 ... Sep 1
Flooding probes begin as D.C. Metro reopens. CW p3 ... Sep 8
UMTA continues stress on low-cost transit systems. WO p7 ... Sep 8
Mexico City rail to cost $1.75 billion. p15 ... Sep 8
Tehran awards first contract on transit system. p15 ... Sep 15
San Diego rail plan shuns federal funds. p18 and e p80 ... Sep 15
Adams rolls out mass transit plans,*. p40 ... Sep 22

ABC chapter seeks showdown on Baltimore agreement. p42 ... Sep 22
Judge refuses to stop progress on Phila rail tunnel. p46 ... Sep 22
Precast concrete girders chosen for Miami's elevated. p13 ... Sep 29
Caracas expands transit plan. p16 ... Sep 29
Bond-swap plan would keep Port Authority of NY/NJ in mass transit. p39 ... Oct 6
Rail transit knocked on energy use. p41 and e p148 ... Oct 6
and RC p5 ... Dec 15
Transit officials slam CBO report on energy use as inaccurate. p17 ... Oct 13
and RC p5 ... Dec 15
Transit aid rolls into New York for subways, buses, commuter RR. p21 ... Oct 13
San Fran: traveling forms roll over streetcar tracks to cast station in hill, drawings,**. p22 ... Oct 13
Hong Kong sets dates for subway extension. CW p3 ... Oct 20
Transit officials reassured on aid at APTA meeting,**. p13 ... Oct 20
Excessive deflection hits concrete canopies at D.C. rail station,*. p16 ... Oct 20
Transp. goals still a mixed bag. p14 ... Oct 27
Seoul subway back on track. p18 ... Oct 27
Phila.-Lindenwold, N.J. high-speed transit plans move into design phase. p13 ... Nov 3
Chicago Crosstown Expressway funds switched to transit needs. p15 ... Nov 3
Nine vie for Baltimore subway station project, unit prices. p59 ... Nov 10
Baltimore delays mass transit planning. p22 ... Nov 17
Phila commuter rail tunnel opponents back in court. B p29 ... Nov 17
Tehran digs in on first leg of transit system. p15 ... Nov 24
Budapest subway builders fight soil, water, sewers, drawing, map,**. p24 ... Nov 24
DOT pushes for I-state cut-off, table,**. p8 ... Dec 1
WMATA renews Bechtel's CM contract. p10 ... Dec 1
Miami's transit must pass voters. p11 ... Dec 1
Mich. court okays sharing hwy wealth. B p19 ... Dec 8
Canada eyes Mexican transit projects, map. p15 ... Dec 15
Huge Les Halles station ties together Paris transit, drawing, map,**. Cover and p18 ... Dec 15
Tandy Center, Fort Worth, has own rapid transit system,*. p23 ... Dec 15
Phila.'s old el defies destruction attempt,**. p39 ... Dec 22
Treasury kills Port Authority of NY/NJ mass transit financing plan. p45 ... Dec 22
Miami gets additional UMTA funding, map. p45 ... Dec 22

MATERIALS, see: EQUIPMENT & MATERIALS see also: CONCRETE, STEEL, etc.

MEETINGS
Energy crisis spotlights ASHRAE and boosts demand for its know-how, in Nova Scotia,*. p16 ... Jul 7
NSPE tackles energy problem in Anaheim, Calif. p16 ... Jul 21
Top contractors talk terms with Arabs in Geneva,**. p20 and e p82 ... Jul 21
and RC p5 ... Sep 15
Role of tall bldgs studied at Paris conf. B p21 ... Jul 21
New single-voice talks continue, in NYC. p68 ... Jul 21
IJC confers on Great Lakes pollution in Ont. p13 ... Jul 28
Floating gas plants feasible, Dusseldorf conf. told. CW p3 ... Sep 1
CCE board rejects single-voice proposal (NCEC), in Washington, D.C.,**. p10 ... Sep 8
Earthquake eng seminar in Washington, D.C.,*. p13 ... Sep 15
and RC p9 ... Nov 24
Natl conf on local transp. in Columbus, Ohio,*. p25 ... Sep 15
NCEC Chicago meeting still on; list of members. p60 ... Sep 15
AGC board of directors in Atlanta. CW p3 ... Sep 22
AGC board of directors, in Atlanta. p8 and e p64 ... Sep 29
and RC p11 ... Oct 6
and RCs p9 ... Nov 17
and RC p4 ... Dec 8
Rock Store '77, Stockholm mtg, told underground storage saves energy. p16 ... Sep 29
and e p80 ... Oct 13
17 groups meet to discuss single voice on labor (NCEC), in Chicago. p42 ... Oct 6
Annual convention, N.J. State Council of Carpenters. p44 ... Oct 6
WPCF head presses research, in Phila.,*. p83 ... Oct 6
ACEC seeks better image to fight price competition, in Nashville,*. p135 ... Oct 6
WPCF's 50th annual convention, in Phila.,**. p10 ... Oct 13
Institution of Structural Engineers, in London. e p80 ... Oct 13
Producers' Council, in Williamsburg, Va. p11 ... Oct 20
Transit officials reassured on aid at APTA meeting, in Atlanta,**. p13 ... Oct 20
Principals report progress in single-voice effort (NCEC) in Washington, D.C. p76 ... Oct 20
Intl Conf on Iceberg Utilization at Iowa State U. e p88 ... Oct 20
ASCE hears report on costs survey, in San Fran. p14 ... Oct 27
Georgine attacks Roundtable at ASCE meeting, in San Fran. p17 ... Oct 27
ABC hits minority quotas; releases new member survey, in San Diego,*. p53 ... Nov 3
ASCE's 125th anniversary, in San Fran. e p72 ... Nov 3
Solar projects, energy programs get mixed reviews at Bldg Construc Expo and Conf, in Chicago,**. p19 ... Nov 10
ENR conf: claims abroad present extra risk. p16 ... Nov 17
NCIC takes position opposing minorities program, in Arlington, Va. p10 ... Nov 24
NCEC Steering Comm., CCE, in Washington, D.C.,**. p57 ... Nov 24
Tall bldgs mtg examines urban explosion, in Paris. p9 and e p72 ... Dec 1
Bldg trades launch organizing drive, in Los Angeles,**. p8 and e p80 ... Dec 8
NCEC plans Jan. organization, in Washington, D.C. p57 ... Dec 8
AFL-CIO convention, in L.A. WO p7 ... Dec 22
American Geophysical Union, in San Fran. p47 ... Dec 22
Pasco-Kennewick cable-stayed bridge in starring role at Wash. State Symposium,**. p50 ... Dec 22

MERGERS AND ACQUISITIONS
p68 Jul 21/p62 Sep 15/p58 Nov 24
Betz Labs' subsidiaries sold to employees. p67 ... Jul 21
McKee may buy Tulsa open shop company. p16 ... Aug 18
McDermott buying Babcock and Wilcox. p14 ... Sep 1
Corps asks construc exemption from premerger notification rules. WO p7 ... Sep 22
Contractor merger-acquisition service. p52 ... Sep 29
Harnischfeger moves to take over a competitor. p48 ... Oct 6
URS Corp. plans to move deeper into training. p58 ... Oct 13
Halliburton offers to buy NUS Corp. for $10-m. p54 ... Dec 15

METRIC SYSTEM, see: SPECIFICATIONS & STANDARDS

MILITARY CONSTRUCTION, see: CONSTRUCTION BUSINESS

MINING, see: SOIL

MISSILES, see: SPACE & MISSILES

MODELS, see: SPECIFICATIONS & STANDARDS, BUILDING DESIGN

MODULES, see: BUILDING DESIGN: Prefabs see also: SPECIFICATIONS & STANDARDS

MONORAILS, see: RAILROADS; TRANSPORTATION

MONUMENTS, see: BUILDINGS

MORTGAGES, see: HOUSING

MOVING, see: TRANSPORTATION

N

NASA, see: SPACE

NATIONAL ASSOCIATIONS, SOCIETIES, ETC.—see subject

NAVY, NAVIGATION, UNDERWATER CONSTRUCTION
North Sea plow cuts trench in hard sea floor,*. p13 ... Jul 7
Nuclear submarines proposed to push icebergs to parched areas. p14 ... Jul 7
Power module anchored below Gulf Stream surface. B p17 ... Jul 7
Diving safety rules surface. CW p3 ... Jul 28
Canada: Plow buries record submarine cable run,*. p15 ... Aug 4
Project Seafarer gets clean bill of health. CW p3 ... Aug 11
Trident peak work level will be reached this fall, map, drawing,**. Cover and p24 ... Sep 8
Contract awarded for world's first self-propelled pipelaying reel ship,*. p14 ... Sep 29
Floating plant to set sail for Brazil,*. p22 ... Nov 17
Navy files statement on Project Seafarer. p41 ... Dec 22
Navy's seawater cooling system would cut energy needs. p54 ... Dec 22

NOISE CONTROL, see: ACOUSTICS

NUCLEAR ENERGY, see also: POWER
Princeton: first major fusion energy job let,*. p12 ... Jul 7
Nuclear submarines proposed to push icebergs to parched areas. p14 ... Jul 7
Reducing long lead times for nuclear powerplants unlikely. WO p7 ... Jul 14
European breeder accord, Tenn. plant funding, Carter setbacks. p12 ... Jul 14
Idaho breeder power for potatoes. B p17 ... Jul 14
First standardized nuclear plants in N.Y. CW p3 ... Jul 21
Breeder project stays alive in Tenn.; Ohio enrichment site chosen. p13 ... Jul 21
Conferees dump Tenn. breeder,**. p8 ... Jul 28
NRC ruling permits work on Seabrook to resume. p15 ... Aug 4
Natl A-waste plan coming; will speed plant construc. p12 ... Aug 18
Key N.Y. cooling tower battle brewing. p12 ... Aug 18
Streamlining nuclear construc tougher than expected. WO p7 ... Aug 25
S & L study: nuclear and coal-fired power cost the same. p11 ... Aug 25
Calif. utility plans $4-billion Stanislaus A-station. p11 ... Aug 25
A-plant licensing reform snagged. p9 and e p70 ... Sep 1
Payroll padding charged on S.C. Parr nuclear plant job. CW p3 ... Sep 8
TVA set to build Hartsville (world's biggest) and Phipps Bend A-plants in Tenn. p10 ... Sep 8
NRC okay asked for idle Diablo Canyon A-plant,*. p12 ... Sep 8
Fluor standardized A-plant okayed. p15 ... Sep 8
House votes full breeder reactor funding. p11 ... Sep 29
Underground storage for nuclear wastes? p16 ... Sep 29
Record wooden structure, N.M.'s Trestle Project at Kirkland AFB, to test atomic blast effects, drawing,**. Cover and p18 ... Sep 29
Fight over nuclear plant licensing intensifies. WO p7 ... Oct 6
San Onofre A-plant confusion. RCs p20 ... Oct 6
Brookhaven, N.Y. accelerator in dash for work startup. p41 ... Oct 6
DOJ investigation reveals North Anna, Va. A-plant fault data mishandled,*. p12 ... Oct 13
Calif.: precision space frame trains lasers on target for fusion power test (Shiva),**. p28 ... Oct 20
White House nuclear waste plan may unleash plant construc. p12 ... Oct 27
Calif. A-plant safety laws called unconstitutional. p14 ... Oct 27
Worries over waste could slow nuclear construc. WO p7 ... Nov 10
Carter vetoes Tenn. breeder funds. p14 ... Nov 10
Nuclear plant liability questioned. B p29 ... Nov 17
Dependence on foreign oil: a threat worse than nuclear wastes. e p112 ... Nov 17
Squabble stymies plan to speed up nuclear plant construc. WO p7 ... Nov 24
NRC checks faulty Mich. A-plant safety wiring. p13 ... Nov 24
Floating nuclear powerplants will flow from assembly line,**. Cover and p22 ... Nov 24
TVA alleges uranium conspiracy. p10 ... Dec 1
N.C. utilities will bill for 1987's costs in 1979. p11 ... Dec 1
VEPCO's controversial North Anna A-plant can start fueling; Seabrook, N.H., site approved. p13 ... Dec 8
Growth in power demand keeps slowing. CW p3 ... Dec 15
First U.S. breeder reactor in Pa. CW p3 ... Dec 15
Hassle over old Calif. A-plant, Humboldt Bay, may set seismic design standard. p20 ... Dec 15
Hydrogen explosions down Conn. A-plant. p40 ... Dec 22
S.C. may sue Savannah R. plant for air pollution violations. p44 ... Dec 22
North Anna, Va., nuclear plants licensed. B p56 ... Dec 22

• Foreign
European breeder accord a Carter setback. p12 ... Jul 14
Australia to resume uranium shipments. CW p3 ... Aug 18
Canada drops nuclear chief after losses. p15 ... Jul 21
Canada: Ont. schedules third nuclear plant (Darlington). CW p3 ... Jul 28
France: blood shed over A-plant,*. p15 ... Aug 11
Indian breeder. B p17 ... Aug 11
Iran boosts nuclear power. CW p3 ... Nov 24
Italian agreement promotes sale of Canadian reactors. p16 ... Dec 8
Thailand to use fossil fuel, shelves A-plant generation. p14 ... Dec 8

O

OCEANOGRAPHY, see: NAVY, NAVIGATION

OFFICES, see: BUILDINGS

OFFSHORE CONSTRUCTION
North Sea oil platform flaw detection method sought. p15 ... Jul 7
Tex: $700-m Seadock offshore oil port plan may sink. p14 ... Jul 21
Interior sides with Calif. on offshore installation. B p21 ... Jul 21
Tex. to build own offshore oil port if Seadock fails. p14 ... Jul 28
Cleveland: Sunken hub airport may rise miles offshore in Lake Erie. p13 ... Aug 11
Floating gas plants feasible, Dusseldorf conf. told. CW p3 ... Sep 1
Court OKs East Coast offshore oil drilling. p12 ... Sep 1
and e p98 ... Sep 8
Fluor to design, manage La. LOOP marine work. CW p3 ... Sep 8
Japan may store oil in offshore storage vessels. CW p3 ... Nov 3
Ninian oil platform deck repaired. B p20 ... Nov 10
Ocean floating steel spheres seen as oil ports,*. p17 ... Nov 17
Floating plant to set sail for Brazil,*. p22 ... Nov 17
Floating nuclear powerplants will flow from assembly line,**. Cover and p22 ... Nov 24
Japan develops floating pile plant for Mideast construc,*. p14 ... Dec 1

OPERATIONS RESEARCH, see: MANAGEMENT & PRODUCTIVITY

OVERPASSES, see: BRIDGES

P

PAINT, see: ADHESIVES AND PAINT

PANELS, see: WALLS & PANELS

PARKING, see: BUILDINGS; CITIES; PAVING; TRAFFIC

PARKS, see: RECREATION

PAVING, see also: CONCRETE; HIGHWAYS
Ga. paving job bid 14% below estimate, unit prices. p47 ... Jul 7

Fast runway repaving bars penalty (S.C.).*. p11 ... Jul 28
Brazil: epoxy asphalt cracks on box girder bridge. p15 ... Jul 28
Antitrust suit charges Pa. roadwork monopoly. p85 ... Aug 18
Sand solution to casting stronger overpass deck for Denver runway,**. p12 ... Sep 1
Tex. PIC bridge deck protection project largest to date,**. p43 ... Sep 8
Redesign cures deteriorated Newark roof parking deck, drawing,*. p12 ... Sep 15
Asphalt-cement mix, cold ascon, forms cutoff walls and membranes. p17 ... Sep 15
NIOSH: worker exposure to asphalt should be limited. p76 ... Oct 20
Pa. researchers claim oil, spirits bath prolongs concrete bridge deck life. p15 ... Nov 10
Chicago hwy contractors guilty of bid-rigging, fraud. p15 ... Nov 10
NYC's George Washington bridge gets prepaved deck overnight,**. p24 ... Nov 10
Sulfur/asphalt hits 6-mile record on Alberta hwy job. p15 ... Dec 1
Crumbling Dallas roadway is good without repaving,**. p24 ... Dec 1
Mass., R.I. asphalt firms charged with antitrust violations. p15 ... Dec 8

PHOTOGRAPHY, PHOTOGRAMMETRY
DOT studies remote sensing techniques to survey wetlands for road construc. p56 ... Dec 22

PIERS, see: BRIDGES; PORTS

PILES, see also: SOIL
Calif.: Italian pile system supports slide,*. p16 ... Nov 24
Japan develops floating pile plant for Mideast construc,*. p14 ... Dec 1

PIPES
U.S. interagency group favors Alcan gas line route. CW p3 ... Jul 7
North Sea plow cuts trench in hard sea floor,*. p13 ... Jul 7
North Sea oil platform flaw detection method sought. p15 ... Jul 7
Me. section of $2 billion New Brunswick to Albany pipeline approved. B p17 ... Jul 7
$10-billion Alcan gas line gets nod from energy board, map,**. p9 and e p80 ... Jul 14
Fatal Alaska pipeline blast levels pump bldg.,**. p10 ... Jul 14
Calif. eases plastic pipe rules. p17 ... Jul 14
Alaska pipeline blast laid to safety violations. CW p3 ... Jul 21
Houston pipe trestle disguised as bicycle bridge,*. p11 ... Jul 28
Alaskan oil flowing after third shutdown. p13 ... Jul 28
OPEC: energy economics. e p72 ... Jul 28
and RC p9 ... Nov 24
Arctic Gas disbands, drops pipeline plan. p14 ... Aug 4
FEA salt dome oil storage plans accelerating. CW p3 ... Aug 11
and RCs p11 ... Sep 22
and RC p5 ... Sep 22
and RC p30 ... Dec 13
$10-billion Alcan gas project can proceed. p12 ... Dec 22
Canada backs $10-billion Alcan gas pipeline. CW p3 ... Aug 11
Coal slurry churns up lawsuits. CW p3 ... Aug 18
Alaska pipeline waste put at $1.5 billion. p15 ... Aug 18
Helicopter eases Ohio Edison's pipe removal,**. p25 ... Aug 18
$1-billion Mexican gas link. B p25 ... Aug 18
A win for coal slurry. CW p3 ... Aug 25
Port of Long Beach enters Alaskan crude terminal fight. CW p3 ... Aug 25
Court OKs East Coast offshore oil drilling. p12 ... Sep 1
and e p98 ... Sep 8
Bechtel sued for overtime on Alaska pipeline work. p15 ... Sep 1
Alaska pipeline equip sale to throttle up. p16 ... Sep 8
U.S., Canada clear $14-billion Alcan gas line, map,**. p9 and e p80 ... Sep 15
Calif. speeds big LNG terminal. CW p3 ... Sep 22
Carter backs pipelines to move Alaskan oil from West Coast. p42 ... Sep 22
Alcan gas pipeline's top job open. CW p3 ... Sep 29
Alcan pipeline agreement signed, Long Beach port plan progresses. p9 ... Sep 29
Contract awarded for world's first self-propelled pipelaying reel ship,*. p14 ... Sep 29
Another delay for Long Beach oil port. CW p3 ... Oct 6
Coal slurry bill flowing. CW p3 ... Oct 6
Alyeska sells to Mexicans, Alcan looks at camp sites. p42 ... Oct 6
Russia to build its longest pipeline, map. p50 ... Oct 6
$500-m LNG terminal in Canada, $2-billion New England pipeline challenged, map. p13 ... Oct 13
Amendment protects Puget Sound, kills Trans Mountain oil pipeline from Northwest. p14 ... Oct 13
Designers race against time to get oil into salt domes,**. p16 ... Oct 13
Spiralweld pipe forms water units at Wyo. Laramie River Station power project,*. p16 ... Oct 20
Alaska pipeline pump station repair in high gear. p18 ... Oct 27
Japan may store oil in offshore storage vessels. CW p3 ... Nov 3
Key men on Alaska pipeline starting their own company. p54 ... Nov 3
and e p88 ... Nov 10
Alcan big gas pipeline still has hurdles. p16 ... Nov 10
Ninian oil platform deck repaired. B p20 ... Nov 10
Calif.: aluminum forms, inflatable-tube forming system, speed big diameter storm drain,**. p26 ... Nov 10
Ocean floating steel spheres seen as oil ports,*. p17 ... Nov 17
PPI blasts plastic pipe ban in West Coast one-story bldgs. p15 ... Dec 1
Pa. utility hot line for quick location of buried lines. p16 ... Dec 1
Major LNG terminals face hazy future, map. p10 ... Dec 8
Alcan gas pipeline builder presses for loan guarantees, map. p8 ... Dec 15

PLATFORMS, see SCAFFOLDS

PLUMBING, see: BUILDING DESIGN AND COMPONENTS

PLYWOOD, see: LUMBER

PLANNING & ENVIRONMENT see also: ARCHITECTURE; CITIES; ZONING; MANAGEMENT
EPA funds studies to halt N.Y. sludge dumping. p15 ... Jul 7
Me. section of $2 billion New Brunswick to Albany pipeline approved. B p17 ... Jul 7
EPA to limit asbestos quarry. B p17 ... Jul 7
EPA seeks solid waste suggestions. CW p3 ... Jul 14
$10-billion Alcan gasline gets nod from energy board, map,**. p9 and e p80 ... Jul 14
SBA halts, EPA supports minority set-aside plans. p57 ... Jul 14
CEQ losing impact statement role. WO p7 ... Jul 21
EPA hits tractors with new noise rules. p15 ... Jul 21
EPA report: scrub coal plant fumes. CW p3 ... Jul 28
EPA, states sue TVA on emissions. p14 ... Jul 28
Coal burning threatens climatic stability. p18 ... Aug 4
Intervenors must pay court costs, (FPC). p18 ... Aug 4
Blood shed over French A-plant,*. p15 ... Aug 11
TVA to study thermal effects on aquatic life. B p17 ... Aug 11
Federal subsidy of intervenors in suits opposed. e p64 ... Aug 11
Key N.Y. cooling tower battle brewing. p12 ... Aug 18
L.A. ordered to comply with ocean sludge disposal schedule. p20 ... Aug 18
EPA sues L.A. over Hyperion plant modification delay. CW p3 ... Aug 25
Texas: advanced sewage treatment fails cost-environmental benefit test. p13 ... Aug 25
Court gives Lake Tahoe area planners legal immunity. p14 ... Aug 25
Calif. counties institute fees-for-air-pollution system. p14 ... Aug 25
Corps to study why Kinzua Dam fish don't bite. CW p3 ... Sep 1
Colorado R. pollution suit seeks EPA control of salinity. p13 ... Sep 1
Rare species hit TVA's Columbia Dam. p15 ... Sep 1
EPA pledges $1-billion for Boston harbor clean-up. p15 ... Sep 8
Rare mussel below Columbia Dam another endangered species. CW p3 ... Sep 15
Corps to help EPA manage waste treatment construc. CW p3 ... Sep 22
Don't drink wastewater. RC p20 ... Sep 22
Most states commit available water cleanup funds. p39 ... Sep 22
EPA enlists Corps to manage sewage plant construc,*. p10 ... Sep 29
Communities shun 25% pollution-control loans. p12 and e p64 ... Sep 29
D.C.-Md. agree to end sewer ban, sue EPA. B p16 ... Sep 29
EPA wants to clear up confusion over waste treatment plant audit demands. WO p7 ... Oct 13
EPA orders planning priority for land disposal of wastes,**. p10 ... Oct 13
House vote prohibits sludge dumping after '81. CW p3 ... Oct 20
Me.'s Dickey-Lincoln hydro project jeopardized. p9 ... Oct 20
EPA relaxes standards on sewage settling ponds. p15 ... Oct 20
Do we overspend on environment? e p88 ... Oct 20
and RC p4 ... Dec 15
EPA begins crackdown on federal agency pollution. WO p7 ... Oct 27
ASCE study claims social, environmental rules lift construc costs. p14 ... Oct 27
Environmental impact statements may be simplified. WO p7 ... Nov 3
Some coal-fired powerplants escape emission requirements,*. p10 ... Nov 3
L.A. area powerplant air cleanup may cost billions. p10 ... Nov 3
Snail darter massacre at Tellico Dam. p13 ... Nov 3
Study finds AWT plants an EPA planning flop. p12 ... Nov 10
EPA wants more minority participation. p19 ... Nov 10
Worries over airborne asbestos may restrict rock quarries. WO p7 ... Nov 17
High court to decide on Endangered Species Act. p15 ... Nov 24
W. German Europa Canal project jeopardized, map. p15 ... Nov 24
EPA eases solid waste rules to encourage state participation. WO p7 ... Dec 1
TVA scrubs air cleanup fight. p14 ... Dec 1
EPA enforcement plan takes profit from pollution. p10 ... Dec 8
EPA exacts stiff agreement, record pollution fine from Memphis. p11 ... Dec 8
ASCE Viewpoint: Let's not deep-freeze so much of Alaska, map. p24 ... Dec 8
Arbitrators study way to avoid environmental suits. p17 ... Dec 15
Business will get early warning on regs from agencies. WO p7 ... Dec 22
Conserving irrigation water is aim of interagency study. p40 ... Dec 22
Navy files statement on Project Seafarer. p41 ... Dec 22
Design change in N.H. ends 20-year I-state battle. p44 ... Dec 22
EPA blocks award of Newark treatment plant contract. p46 ... Dec 22

PLASTICS, RUBBER
Calif. eases plastic pipe rules. p17 ... Jul 14
Study of combustibles in prisons. B p25 ... Aug 18
PPI blasts plastic pipe ban in West Coast one-story bldgs. p15 ... Dec 1

PORT AUTHORITY OF NEW YORK AND NEW JERSEY
FHWA clears higher NYC area tolls to help finance mass transit. p15 ... Aug 18
Bond-swap plan would keep agency in mass transit. p39 ... Oct 6
Treasury kills Port Authority of NY/NJ mass transit financing plan. p45 ... Dec 22

PORTS & HARBORS
Portland shipyard gets bigger. B p17 ... Jul 7
Tex: $700-m Seadock offshore oil port plan may sink. p14 ... Jul 21
Galveston Port terminal for Pelican Is.? B p21 ... Jul 21
Del. super-buoy terminal. B p21 ... Jul 21
Interior sides with Calif. on offshore installation. B p21 ... Jul 21
Tex. to build own offshore oil port if Seadock fails. p14 ... Jul 28
Port of Long Beach enters Alaskan crude terminal fight. CW p3 ... Aug 25
Fluor to design, manage La. LOOP marine work. CW p3 ... Sep 8
EPA pledges $1-billion for Boston harbor clean-up. p15 ... Sep 8
All bidders over Oakland marina estimate, unit prices. p79 ... Sep 8
Calif. speeds big LNG terminal. CW p3 ... Sep 22
Long Beach port plan progresses. p9 ... Sep 29
Another delay for Long Beach oil port. CW p3 ... Oct 6
Japanese grab Portland steel dry dock contract. CW p3 ... Oct 6
Ocean floating steel spheres seen as oil ports,*. p17 ... Nov 17
Major LNG terminals face hazy future, map. p10 ... Dec 8
Prefab ports for U.S. from Japan, Brazil. WO p7 ... Dec 22
Fast-tracking speeds San Fran's North Point Pier redevelopment,**. p63 ... Dec 22

• **Foreign**
Canada: $500-m LNG terminal challenged, map. p13 ... Oct 13
Dubai: Largest dry dock running 25% over budget,*. p15 ... Dec 15
Great Britain: Scotland's floating prestressed breakwater zigzags to beat waves,**. p12 ... Sep 29
Iran port consultant correction. RC p8 ... Aug 4
Japan may store oil in offshore storage vessels. CW p3 ... Nov 3
Portugal: Europe's deepest port, Sines industrial zone rise behind giant breakwater, drawing,**. Cover and p16 ... Aug 25
and RC p12 ... Dec 22
Saudi Ras al Mishab port pays $3-m bonus,*. p12 ... Aug 25
Saudi port has record-size desalting plant. p12 ... Aug 25

POWER, see also: ATOMIC ENERGY; DAMS; RIVERS; UTILITIES
NAHB predicts energy-related materials shortages. CW p3 ... Jul 7
Coal section of energy package jeopardized too. WO p7 ... Jul 7
Carter energy message puts utilities in quandary. p11 ... Jul 7
Energy crisis spotlights ASHRAE and boosts demand for its know-how,*. p16 ... Jul 7
Power module anchored below Gulf Stream surface. B p17 ... Jul 7
Calif. combined cycle plant. B p17 ... Jul 14
Energy program's home insulation subsidy hit by FTC probe. p57 ... Jul 14
NYC: Lightning strikes out Con Ed, map,**. p12 ... Jul 21
Calif. building energy code still not resolved. p14 ... Jul 21
NSPE tackles energy problem. p16 ... Jul 21
Heat pump misuse costs more. B p21 ... Jul 21
N.J. first to have state energy dept. B p21 ... Jul 21
EPA report: scrub coal plant fumes. CW p3 ... Jul 28
Gasoline tax for transit, energy R&D. WO p7 ... Jul 28
Conferees dump nine water projects,**. p8 ... Jul 28
and RC p10 ... Nov 17
EPA, states sue TVA on emissions. p14 ... Jul 28
Reducing blackout problems. e p72 ... Jul 28
and RC p4 ... Dec 8
Ocean thermal energy (OTEC) plant proposals set,*. p17 ... Aug 4
Intervenors must pay court costs. p18 ... Aug 4
ERDA super turbine propels federal wind energy program. p19 ... Aug 4
House energy bill emphasizes conservation, construc,**. p9 ... Aug 11
New Dept of Energy absorbs many functions. p9 ... Aug 11
Utah's Intermountain project may meet clean air standards. p12 ... Aug 11
TVA cuts heating costs 33% in pilot insulation program. p13 ... Aug 11
FPC cites deficiencies leading to NYC blackout. p15 ... Aug 11
TVA to study thermal effects on aquatic life. B p17 ... Aug 11
Carter continues fight against water projects on hit list. WO p7 ... Aug 18
Key N.Y. cooling tower battle brewing. p12 ... Aug 18
Calif. licensing boards to evaluate energy conservation skills. p13 ... Aug 18
Newark: PSE & G HQ's heat will be 96% recovered energy. p14 ... Aug 18
Faulty weld cited in Pa. powerplant explosion. p16 ... Aug 18

ERDA selects Curtiss-Wright for synfuel turbine. B p25 ... Aug 18
Tex. coal-gas-to-hydrogen plant. B p25 ... Aug 18
S & L study: nuclear and coal-fired power cost the same. p11 ... Aug 25
ERDA will test fuel cell in NYC. p15 ... Aug 25
NYC Con Ed blackout report cites malfunctions, slow response. p8 ... Sep 1
The Geysers geothermal power station expanding to 1,128 Mw. p16 ... Sep 8
TVA proposes $1-billion energy package. p20 ... Sep 8
Smaller hydropower. RC p20 ... Sep 22
Energy R & D will be streamlined. p48 ... Sep 22
Energy quest spurs Denver building boom,**. p64 ... Sep 22
Carter's coal plan faces mounting doubts in Congress. WO p7 ... Sep 29
Rock Store '77, Stockholm meeting, told underground storage saves energy. p16 ... Sep 29
and e p80 ... Oct 13
Chicago's Commonwealth Edison slates four coal-fired powerplants. p16 ... Sep 29
Carter probably will recoup on energy setbacks. WO p7 ... Oct 6
Rail transit knocked on energy use. p41 and e p148 ... Oct 6
and RC p5 ... Dec 15
Corps into Pacific Northwest wind power. B p50 ... Oct 6
Pyrolyzing sewage sludge alone moves slowly toward market place,*. p76 ... Oct 6
Transit officials slam CBO report on energy use as inaccurate. p17 ... Oct 13
and RC p5 ... Dec 15
All-electric combination cuts Ohio Goodrich facility energy costs. p17 ... Oct 13
No-strike pact doesn't bar sympathy actions (Kan.). p58 ... Oct 13
Me.'s Dickey-Lincoln hydro project jeopardized. p9 ... Oct 20
Spiralweld pipe forms water units at Wyo. Laramie River Station power project,*. p16 ... Oct 20
ERDA's Calif. office offers small-scale energy production grants. p18 ... Oct 27
Hyatt Regency conservation. RC p4 ... Nov 3
Carter's imprint will be on Congress' energy plan. WO p7 ... Nov 3
Some coal-fired powerplants escape emission requirements,*. p10 ... Nov 3
L.A. area powerplant air cleanup may cost billions. p10 ... Nov 3
Old hands direct new energy office. p12 ... Nov 3
Bid call on second Bonneville powerhouse. CW p3 ... Nov 10
Energy use to quadruple by 2020. p17 ... Nov 10
Solar projects, energy programs get mixed reviews at Bldg Construc Expo and Conf,**. p19 ... Nov 10
Manual on energy conservation planning. B p20 ... Nov 10
Wyodak, Wyo.: arid, coal-rich site gets biggest air-cooled powerplant, drawing,**. p27 ... Nov 10
Kan. utilities adopt energy code. p24 ... Nov 17
Dependence on foreign oil: a threat worse than nuclear wastes. e p112 ... Nov 17
Standardized coal plants. CW p3 ... Nov 24
Energy, housing rehab big at British show, Interbuild. p14 ... Nov 24
Geothermal pilot project will test heating scheme for Calif. town, map. p17 ... Nov 24
N.C. utilities will bill for 1987's costs in 1979. p11 ... Dec 1
Volcanic heat may trim Portland's gas use. p16 ... Dec 1
Small powerplant pacesetter at Racine Locks and Dam,*. p11 ... Dec 8
Bell retrofits for energy savings,*. p13 ... Dec 8
Growth in power demand keeps slowing. CW p3 ... Dec 15
Carter aides hassle over water project controversy. WO p7 ... Dec 15
Western utilities push standard coal plant design. p10 ... Dec 15
S.C. may sue Savannah R. plant for air pollution violations. p44 ... Dec 22
Fabric filters bag coal plant ash,**. p48 ... Dec 22
Bonneville Dam squeezes in new powerhouse, map,**. p64 ... Dec 22

• Solar
Assessment shows solar energy promising. p15 ... Jul 14
Mass.: Abt Associates' offices erected without framing,*. p15 ... Jul 14
White House solar options considered in ERDA study. p17 ... Jul 21
Cheap sun power possible through photovoltaic material. p15 ... Jul 28
Proposed tax incentives brighten Dallas solar trade show. p14 ... Sep 8
Solar retrofits for Calif. state bldgs. B p50 ... Oct 6
Subterranean design for energy-efficient Sacramento State Office wins competition,*. p14 ... Oct 13
Solar energy tapped to dry beans in Ala.,*. p17 ... Oct 13
and RC p6 ... Dec 15
Saudis team with U.S. for solar research project. CW p3 ... Nov 10
Solar projects, energy programs get mixed reviews at Bldg Construc Expo and Conf,**. p19 ... Nov 10
Sun showers for hotel guests. CW p3 ... Nov 17
Calif. advocates pro-solar standards. p14 ... Nov 17
Bell retrofits for energy savings,*. p13 ... Dec 8
Germany: Large wind turbine solar energy plants proposed,*. p14 ... Dec 8
Solar furnace planned for Chilean desert. p15 ... Dec 8
Colo. center will plan U.S.-Saudi solar program. p17 ... Dec 8
Solar plans still alive at Citicorp. p17 ... Dec 15
PG&E seeks permit for Kerckhoff hydro expansion. B p56 ... Dec 22

• Foreign
Argentina tapping hydropower to the tune of $12 billion, map,**. p20 ... Dec 8
Argentina's Salto Grande complex,**. p20 ... Dec 8
Australian oil crunch fuels alternative energy hunt,**. p32 ... Aug 4
Australia: welder frees oxygen, hydrogen from H_2O. p16 ... Dec 15
Brazil: Russian machines for Itaipu. RC p8 ... Aug 4
Brazil: Generator flap frazzles Itaipu timetable. p19 ... Aug 4
Brazil's Itaipu hydro cost up 31% due to inflation. CW p3 ... Sep 1
Brazil: Itaipu power accord set, big generator bids moving. p18 ... Nov 17
Brazil borrowing boost adds power to energy plan. p29 ... Nov 17
Canada: plow buries record submarines cable run,*. p15 ... Aug 4
Chile: solar furnace planned for desert. p15 ... Dec 8
Germany: large wind turbine solar energy plants proposed,*. p14 ... Dec 8
Great Britain: studies favor tidal power dam, drawing, map. p24 ... Jul 14
Guatemala: Pueblo Viejo-Quixal hydro project. B p18 ... Sep 15
India builds power network, Beas Project, map,**. p16 ... Jul 28
Israel seeks hydro power from Mediterranean-Dead Sea link. CW p3 ... Jul 28
Japan: toy plane eased tough cable spanning job,*. p16 ... Sep 8
and RC p16 ... Oct 6
Jap. utility cools underground cable with water instead of oil. p17 ... Dec 1
Japan eyes energy conservation. B p19 ... Dec 8
Korean tidal power. B p20 ... Nov 10
Nepal plans 3,600-Mw Karnali hydro. p15 ... Sep 1
Peru spending big on water jobs. p20 ... Nov 10
Saudis team with U.S. for solar research project. CW p3 ... Nov 10
Saudi-U.S. solar program planned by Colo. center. p17 ... Dec 8
Swiss pumped storage project, Grimsel II East, picks up where dams leave off, drawing,**. p26 ... Oct 20
Thailand to use fossil fuel, shelves A-plant generation. p14 ... Dec 8
Turkish Karakaya hydro project. B p17 ... Dec 1
USSR: Sayan's record powerhouse will spur Siberian development, map,**. Cover, p22 and e p82 ... Jul 21
USSR: Boguchany hydro on Angara River. B p17 ... Aug 11
USSR: clear rules promised for U.S.-USSR energy project ventures. WO p7 ... Nov 24
Yugoslavia invites westerners to bid on transmission network. B p56 ... Dec 22

PRICES. see: CONSTRUCTION BUSINESS

PRODUCTIVITY, see: MANAGEMENT & PRODUCTIVITY

PRODUCTS—see PRODUCT MANUFACTURERS

PUBLIC WORKS, see: Project in question see also: CONSTRUCTION BUSINESS; ECONOMY

PUMPED STORAGE: see POWER

R

RADAR, RADIO, see: COMMUNICATIONS

RADIOACTIVITY, RADIATION, see: NUCLEAR ENERGY

RAILROADS see also: MASS TRANSIT TRANSPORTATION; TUNNELS
Australia derailment inevitable. B p17 ... Jul 7
Saudis eye $4-billion desert rail line, map. p9 ... Aug 25
$500-m in Northeast Corridor improvements sidetracked, map. p11 ... Sep 8
Mexico City rail to cost $1.75-billion. p15 ... Sep 8
Judge refuses to stop progress on Phila rail tunnel. p46 ... Sep 22
Venezuela's $1.4-billion railroad pact signed. p14 ... Sep 29
Transit aid rolls into New York for subways, buses, commuter RR. p21 ... Oct 13
Amtrak rebuilding plan criticized for lack of focus. WO p7 ... Oct 20
$1.8 billion to be parceled out for Northeast Corridor rail improvement, map, table. p15 ... Oct 20
South African precaster vies for Northeast rail corridor minority contract. p13 ... Nov 3
Phila commuter rail tunnel opponents back in court. B p29 ... Nov 17
NE Corridor to use latest tie, rail repair machine, map, drawing,*. p11 ... Nov 24
Studies for trans-Sahara railway. B p17 ... Dec 1
French oversee Iran rails. B p19 ... Dec 8
French design Afghan rail system. B p19 ... Dec 8
Mich. court okays sharing hwy wealth. B p19 ... Dec 8
A winner for Northeast Corridor concrete ties. CW p3 ... Dec 22

RECLAMATION, see: SOIL; WATER RESOURCES

RECREATION; SPORTS see also: BUILDINGS • Culture
Conflict of interest seen in Fla. zoo contract. p76 ... Oct 20
Eng cleared of conflict of interest in Fla. zoo contract. CW p3 ... Oct 27

RESEARCH & TESTS; see also: SPECIFICATIONS AND STANDARDS
Precast segmental test span may solve bridge woes (Pa.),**. p9 ... Jul 7
and RC p18 ... Oct 6
NIBS funded. B p21 ... Jul 21
Gasoline tax for transit, energy R&D. WO p7 ... Jul 28
Concrete strength evaluation speeded by chemical process, (Kelly-Vail test). p16 ... Aug 4
Ocean thermal energy (OTEC) plant proposals set,*. p17 ... Aug 4
ERDA super turbine propels federal wind energy program. p19 ... Aug 4
TVA to study thermal effects on aquatic life. B p17 ... Aug 11
ERDA will test fuel cell in NYC. p15 ... Aug 25
Congress okays $210-m for earthquake research,*. p13 ... Sep 15
and RC p9 ... Nov 24
GAO blasts Coalcon coal gasification project. p13 ... Sep 15
BRAB executive manager. B p18 ... Sep 15
Energy R&D will be streamlined. p48 ... Sep 22
Record wooden structure, N.M.'s Trestle Project at Kirkland AFB, to test atomic blast effects, drawing,**. Cover and p18 ... Sep 29
Calif.: precision space frame trains lasers on target for fusion power test (Shiva),**. p28 ... Oct 20
Interior makes water recycling R&D grants. p15 ... Oct 27
ERDA's Calif. office offers small-scale energy production grants. p18 ... Oct 27
Clear rules promised for U.S.-USSR energy project ventures. WO p7 ... Nov 24
Carter promises more federal aid for R&D. WO p7 ... Dec 1
CERL's research pays off on army projects, chart,**. p20 ... Dec 1
CERL's Kelly-Vail rapid concrete test,*. p20 ... Dec 1
CERL's shock test machine world's largest. p21 ... Dec 1
Tricky forming for GM's Mich. concrete wind tunnel, drawing,*. p12 ... Dec 8
Phila.'s old el defies destruction attempt,**. p39 ... Dec 22

RESERVOIRS, see: WATER RESOURCES see also: BUILDINGS

RETAINING WALLS
Builder squeezes Minn. jail against cliff,**. p14 ... Jul 7
Dallas underpasses built in halves as tiebacks support trackbed. p28 ... Jul 21
Low bidder 3% below rival for La. revetment contract, unit prices. p132 ... Sep 22
Calif.: Italian pile system supports slide,*. p16 ... Nov 24
W. Va.: Reinforced Earth system's 50-ft walls prevent embankment slides on hilly hwy. p16 ... Dec 15

RIVERS see also: DAMS; POWER; WATER RESOURCES

• By Name

Colorado River
Pollution suit seeks EPA control of salinity. p13 ... Sep 1

Kissimmee River
Controversy. RCs p18 ... Oct 6

Tennessee River
House, Senate to battle over user tax for waterways,*. p10 ... Oct 20

Tombigbee River
House, Senate to battle over user tax for waterways,*. p10 ... Oct 20

ROCKS, see: SOIL see also: EXPLOSIVES

ROOFS
San Fran's Yerba Buena Center to get clear-span hall, drawings. p11 ... Aug 11
Redesigned roof turns stresses inside out at Bradford, England sports center,**. p18 ... Aug 25
Redesign cures deteriorated Newark roof parking deck, drawing,*. p12 ... Sep 15
Basketball spurs San Antonio sports arena to new roof height,**. p55 ... Oct 6
Geiger-Berger team makes fabric tension roofs take off, drawing,**. Cover and p28 ... Nov 10
Glass, concrete triangles, roof Riyadh airport terminals,**. p15 ... Nov 17
Montreal Olympic Stadium roof. B p17 ... Nov 24
Pyramids, parabolas, cables form Saudi velodrome roof, drawing,*. p20 ... Nov 24
Wraparound roof straddles West Berlin's Congress Center to quiet din, drawings,**. p26 ... Nov 24

RUNWAYS, see: AIRPORTS; PAVING

S

SAFETY, see: ACCIDENTS & SAFETY

SANITATION, see: HEALTH; SEWAGE; WATER POLLUTION

SCAFFOLDS AND PLATFORMS
Three men killed when scaffold falls 13 stories at Boston hospital job. p45 ... Sep 22

SCANDALS, see: ETHICS

SCHOOLS, see: BUILDINGS

SEABEES, see: NAVY

SEISMIC DESIGN, see: SOIL

SEWAGE: see also: WATER POLLUTION
Carter water conservation proposal could trim sewage grants. CW p3 ... Jul 7
EPA funds studies to halt N.Y. sludge dumping.

p15 ... Jul 7
Disparate groups urge unity on clean water. p13 ... Jul 14
Reducing blackout problems. e p72 ... Jul 28
and RC p4 ... Dec 8
Senate passes Clean Water Act. p12 ... Aug 11
L.A. ordered to comply with ocean sludge disposal schedule. p20 ... Aug 18
EPA sues L.A. over Hyperion plant modification delay. CW p3 ... Aug 25
Water bill difference may cause stalemate in conference. WO p7 ... Sep 1
Corps to help EPA manage waste treatment construc. CW p3 ... Sep 22
EPA indexes show shrinking cost hikes. p129 ... Sep 22
EPA enlists Corps to manage sewage plant construc,*. p10 ... Sep 29
Communities shun 25% pollution-control loans. p12 and e p64 ... Sep 29
ENR survey forecasts flood in 1978 sewerage market, table. p40 ... Oct 6
Industrial dumps threaten groundwater. p69 ... Oct 6
Contra Costa, Calif. energy guzzling sewage plant will fuel itself by pyrolysis, drawing,**. p70 ... Oct 6
Rising sewage plant operation costs beg engineered solutions. p71 ... Oct 6
Pyrolyzing sewage sludge alone moves slowly toward market place,*. p76 ... Oct 6
EPA wants to clear up confusion over waste treatment plant audit demands. WO p7 ... Oct 13
EPA orders planning priority for land disposal of wastes,**. p10 ... Oct 13
House vote prohibits sludge dumping after '81. CW p3 ... Oct 20
EPA relaxes standards on sewage settling ponds. p15 ... Oct 20
Interior makes water recycling R&D grants. p15 ... Oct 27
Study finds AWT plants an EPA planning flop. p12 ... Nov 10
EPA wants more minority participation. p19 ... Nov 10
Clean water amendments set,**. p12 ... Nov 17
and photo correction RC p8 ... Dec 22
Costs rising at faster pace. p102 ... Dec 22

• American

Arizona
Winner 13% below rival for Phoenix airport sewer job, unit prices. p66 ... Oct 20

California
Corporate partnership takes Calif. sewer job, unit prices. p47 ... Jul 7
Big San Fran sewer CM job let. CW p3 ... Jul 14
Sympathy strike results in San Fran pollution fine. CW p3 ... Sep 29
San Fran beach, Great Hwy, sewer plan rolled into one, drawing. p44 ... Oct 6
Low bidder 38% below San Fran sewer estimate, unit prices. p56 ... Oct 27
Aluminum forms, inflatable-tube forming system, speed big diameter storm drain,**. p26 ... Nov 10

Connecticut
Eleven vie for job, unit prices. p56 ... Aug 25

D.C.
D.C.-Md. agree to end sewer ban, sue EPA. B p16 ... Sep 29

Illinois
Chicago MSD deep tunnel bid high again. CW p3 ... Jul 7
Five convicted for Chicago MSD sludge hauling bribes. p18 ... Nov 17
Winner 0.8% below rival for sewer job, unit prices. p46 ... Dec 1
Chicago MSD bribery convictions bring stiff sentences. p45 ... Dec 22

Kentucky
Lowest of seven bidders wins contract, unit prices. p108 ... Dec 22

Maryland
D.C.-Md. agree to end sewer ban, sue EPA. B p16 ... Sep 29

Massachusetts
EPA pledges $1-billion for Boston harbor cleanup. p15 ... Sep 8

Michigan
Eighteen bid for Mich. relief sewer, unit prices. p39 ... Sep 1
Bids spread wide for East Detroit sewer, unit prices. p79 ... Sep 8

Montana
AGC protest over set-asides halts Kalispell job bids. p12 ... Oct 27

New Jersey
Hungry contractors drive Newark plant bids down. p12 ... Jul 28
Eng pleads guilty to sewerage design fraud. p44 ... Sep 22
Winner 6% below estimate on sewer job, unit prices. p131 ... Sep 22
EPA blocks award of Newark treatment plant contract. p46 ... Dec 22

New York
Bidding flap blocks Brooklyn sewerage award, unit prices. p56 ... Dec 8
Bidding errors disqualify firm for Brooklyn sewage job, unit prices. p52 ... Dec 15

North Dakota
Winner 14% below sewer estimate, unit prices. p131 ... Oct 6

Ohio
Bid 6% under estimate, unit prices. p52 ... Jul 14

Pennsylvania
Bids spread wide for sewer job, unit prices. p56 ... Aug 4
Heavy rains, poor soil force internal sewer repair. p20 ... Aug 25
Phila. treatment plant spills four tons of chlorine gas. p13 ... Oct 13

Tennessee
EPA exacts stiff agreement, record pollution fine from Memphis. p11 ... Dec 8

Texas
Salvaging old Dallas sewage plant cuts treatment costs,*. p23 ... Jul 14
Advanced sewage treatment fails cost-environmental benefit test. p13 ... Aug 25

Wisconsin
Ill. suit forces faster Milwaukee wastewater cleanup. p11 ... Aug 11
Ill., Milwaukee clash on plant cleanup. p14 ... Sep 29
Eight vie for sewer job, unit prices. p55 ... Oct 13
Milwaukee agrees to Lake Michigan water cleanup. CW p3 ... Nov 17

• Foreign
Brazil: $4.7 billion for Sao Paulo sewers marks investment shift,*. p44 ... Dec 22
Egypt: U.S. consultants for water, sewerage programs. B p17 ... Aug 11
Egypt: Big Cairo sewer project. CW p3 ... Oct 27
South Africa: Pollution. B p19 ... Dec 8

SHIPWAYS, see: CANALS; PORTS & HARBORS

SHIPYARDS: see PORTS and HARBORS

SHORTAGES, see: EQUIPMENT & MATERIALS

SKYSCRAPERS, see: BUILDINGS

SLUM CLEARANCE, see: CITIES; HOUSING

SMALL BUSINESS ADMINISTRATION, see: ECONOMY

SNOW, see: WEATHER

SOCIETIES, see: SUBJECT, e.g. ENGINEERING; RESEARCH, etc.

SOIL AND FOUNDATIONS see also: EARTHQUAKES AND LANDSLIDES; WEATHER; COAL

Compromise strip-mining bill. WO p7 ... Jul 7
U Cal lab probe maps geologic problems, drawing. p11 ... Jul 7
Strip mine restoration finally law. p17 ... Aug 11
Pa.: heavy rains, poor soil force internal sewer repair. p20 ... Aug 25
Air bag foundation planned for Alaska housing on arctic permafrost,*. p14 ... Sep 15
and RC p14 ... Dec 22
USGS: Las Vegas sinking is no emergency. p17 ... Dec 1
DOT studies remote sensing techniques to survey wetlands for road construc. p56 ... Dec 22
Mining pays off for Tucson's Mountain States,**. Cover and p60 ... Dec 22

• Dredging
Corps may contract dredging. p15 ... Jul 28

• Earthmoving, Excavating
Pa. utility hot line for quick location of buried lines. p16 ... Dec 1

• Erosion, Shore Protection, Land Reclamation
San Fran beach, Great Hwy, sewer plan rolled into one, drawing. p44 ... Oct 6
Dutch settle on last closure to guard delta from the North Sea, map, drawing,**. p18 ... Nov 3
Tarbela Dam: new erosion problem solved. p15 ... Nov 17
Conflicting riprap studies. p24 ... Nov 17

• Foundations
Builder squeezes Minn. jail against cliff,**. p14 ... Jul 7
Hong Kong: Deep cutoff wall makes New World Centre site economic, drawing, map,**. p26 ... Jul 21
and RC p10 ... Nov 17
Dallas underpasses built in halves as tiebacks support trackbed. p28 ... Jul 21
U.S. sues over Phila.'s sinking courthouse/office bldg.,*. p11 ... Sep 15
Air bag foundation planned for Alaska housing on arctic permafrost,*. p14 ... Sep 15
and RC p14 ... Dec 22
Asphalt-cement mix, cold ascon, forms cutoff walls and membranes. p17 ... Sep 15
Lessons from sinking Calif. courthouse. RC p11 ... Sep 22
and RC p9 ... Nov 24
GSA's faulty foundations a problem; list of bldgs,**. p37 ... Oct 6
and RC p10 ... Nov 17
and RC p4 ... Dec 1
and RC p4 ... Dec 8
Foundation woes a chronic GSA problem,*. p10 and e p80 ... Oct 27
Rio apt. bldg. shored against sinking into beach. p20 ... Nov 17

• Seismic Design
Seismic study threatens Auburn Dam,*. p9 ... Jul 7
Calif. capitol restructured for quake survival,**. Cover and p18 ... Jul 14
Design, monitoring of more BuRec dams criticized,**. p11 ... Jul 21
Future unsure for San Fran's City of Paris landmark. CW p3 ... Aug 4
Quakes and concrete dams. RC p5 ... Aug 25
NRC okay asked for idle Diablo Canyon A-plant,*. p12 ... Sep 8
Nurek's reservoir creates seismology lab, map. p53 ... Sep 22
BuRec findings conflict on Auburn Dam safety. p13 ... Sep 29
San Onofre A-plant confusion. RCs p20 ... Oct 6
DOJ investigation reveals North Anna, Va. A-plant fault data mishandled,*. p12 ... Oct 13
Japan: Steel pendulum may be quake protection,*. p15 ... Oct 27
Auburn Dam risks. RCs p2 ... Nov 3
Computerized probe predicts soil behavior during quakes. p13 ... Dec 15
Hassle over old Calif. A-plant, Humboldt Bay, may set seismic design standard. p20 ... Dec 15

SOLAR ENERGY, see: POWER; AIR CONDITIONING, HEATING VENTILATION

SONIC BOOM, see: AIRCRAFT

SPACE AND MISSILES
Missile X tunnel project digs in. CW p3 ... Aug 18
Sverdrup & Parcel to design Vandenberg AFB space shuttle complex. CW p3 ... Sep 15
$800-m Vandenberg AFB space shuttle project set for blast-off, drawing. p53 ... Oct 6
Pentagon presses Missile X development,*. p11 ... Oct 20
Satellite spots water pollution where sampling methods fail. p11 ... Dec 15

SPECIFICATIONS, STANDARDS see also: BUILDING CODES; RESEARCH & TESTS; LUMBER
FHWA drops metric signs. B p21 ... Jul 21
Mich. thermal window standard. B p25 ... Aug 18
Texas: Advanced sewage treatment fails cost-environmental benefit test. p13 ... Aug 25
Insulation safety standards a must, say advocates. p11 ... Sep 1
Calif. safety board requires circuit breakers. p58 ... Oct 27
Calif. advocates pro-solar standards. p14 ... Nov 17
Kan. utilities adopt energy code. p24 ... Nov 17
Insulation labeling standards proposed by FTC. CW p3 ... Dec 1
Reduced hwy standards stir up controversy. p9 and e p72 ... Dec 1
FHWA officials think they are too chummy with AASHTO. WO p7 ... Dec 15

STEEL
Fire twists Denver steel bridge girders,**. p14 ... Jul 21
Steel price hikes attacked by Carter. p12 ... Jul 28
Cables to carry Mississippi R. Bridge twin steel box girder superstructure,*. p23 ... Aug 11
Okla City: steel-frame Biltmore hotel to be blown up. CW p3 ... Aug 25
Another price hike next week? p15 ... Sep 1
Calif.'s Antioch Bridge piers, girders, deck go up all at once,**. p54 ... Sep 22
Contractors reap rewards from steel industry problems,*. p87 ... Sep 22
Japanese grab Portland steel dry dock contract. CW p3 ... Oct 6
Corroded rebars collapse Tex. high school stadium stand,**. p42 ... Oct 6
Import competition keeps lid on steel prices. p50 ... Oct 6
Domestic steel use demanded by Pa. bill. CW p3 ... Oct 13
Carter studies Rx for steel firms' ills. p15 ... Oct 13
U.S. to fight steel imports through antidumping laws. WO p7 and e p88 ... Oct 20
Okla City's Biltmore Hotel tallest steel-frame bldg felled by explosives,*. p12 ... Oct 20
Crumbling Miami hotel faces razing. p12 ... Oct 20
R.I. nursing home steel frame goes up in 12 hours,**. p14 ... Oct 20
Steel, lumber prices in Capitol spotlight. p13 ... Oct 27
British eye possible steel fraud, investigate corrosion problem. p20 ... Nov 10
Ninian oil platform deck repaired. B p20 ... Nov 10
"Reference price" plan considered for steel imports. WO p7 ... Nov 17
and e p72 ... Dec 1
El Paso performing arts center suit increased to $10-m by contractor. p13 ... Dec 1
U.S. Steel sets Newburgh-Beacon Bridge contract. CW p3 ... Dec 8
Carter plan offers boost to sagging steel industry,**. p9 and e p72 ... Dec 15
Bethlehem hikes structurals 5.5%. CW p3 ... Dec 22
Bldg trades join AFL-CIO battle for protectionism. WO p7 ... Dec 22

STRATEGIC AIR COMMAND, see: SPACE

STRUCTURAL FAILURES, see: ACCIDENTS AND FAILURES

SUBWAYS, see: MASS TRANSIT

SURVEYING AND MAPPING
U Cal lab probe maps geologic problems, drawing. p11 ... Jul 7
Calif. surveyors win decision on prevailing wage rate issue. p60 ... Sep 15
Satellite spots water pollution where sampling methods fail. p11 ... Dec 15

DOT studies remote sensing techniques to survey wetlands for road construc. p56 ..... Dec 22

SYSTEMS, see: MANAGEMENT; BUILDING DESIGN • Prefabs, Modules and Systems

T

TAXATION & TARIFFS, see also: ECONOMY

GAO studying tax impact on Americans overseas. CW p3 ..... Jul 7
IRS again delays ruling on taxing travel pay. p55 ..... Jul 7
Admin. assembling tax reform package. WO p7 ..... Jul 21
Gasoline tax for transit, energy R&D. WO p7 ..... Jul 28
British overseas workers getting new tax breaks. p25 ..... Aug 18
Ease up on Americans abroad. e p98 ..... Aug 18
New antiboycott tax rules issued. p15 ..... Sep 1
Proposed tax incentives brighten Dallas solar trade show. p14 ..... Sep 8
Tax reform: construc asks relief,*. p10 ..... Sep 15
L.A. challenges tax-increment financing of urban redevelopment projects. p19 ..... Sep 15
Tax abatement programs used in 28 states to spur economy,*. p58 and e p206 ..... Sep 22
GAO says overseas tax change would aid trade balance. WO p7 ..... Sep 29
Tax increases add weight to Md.'s transp budget. p14 ..... Sep 29
Tax breaks for work abroad may continue. WO p7 ..... Oct 6
New travel tax rules expected. p135 ..... Oct 6
House, Senate to battle over user tax for waterways,*. p10 ..... Oct 20
Parroadbuilding halted pending tax hike. p18 ..... Oct 27
Controversial tax changes may be postponed. CW p3 ..... Nov 3
Close vote, slow count keep Wash. roadbuilders on edge. p16 ..... Nov 24
Reinstatement of tax breaks could spark Boston bldg boomlet. p19 ..... Dec 8
Wash. recount of votes on gas tax reduction starts this week. p19 ..... Dec 8
Mich. court okays sharing hwy wealth. B p19 ..... Dec 8
Nuts and bolts may face taxing problem. p9 ..... Dec 15
British contractors demand changes on tax law. p54 ..... Dec 15
U.S. tax rules questioned. RC p28 ..... Dec 22
Plurality of 889 votes blocks Wash. $97-m road budget cut. p42 ..... Dec 22

TELEPHONE, see: UTILITIES

TELEVISION, see: COMMUNICATIONS

TENNESSEE VALLEY AUTHORITY

EPA, states sue TVA on emissions. p14 ..... Jul 28
TVA cuts heating costs 33% in pilot insulation program. p13 ..... Aug 11
TVA to study thermal effects on aquatic life. B p17 ..... Aug 11
TVA set to build Hartsville (world's biggest) and Phipps Bend A-plants in Tenn. p10 ..... Sep 8
TVA proposes $1-billion energy package. p20 ..... Sep 8
New TVA chief pushes bold energy reform,** p20 ..... Oct 20
and RC p12 ..... Dec 22
Snail darter massacre at Tellico Dam. p13 ..... Nov 3
High court to decide on Endangered Species Act. p15 ..... Nov 24
TVA alleges uranium conspiracy. p10 ..... Dec 1
TVA scrubs air cleanup fight. p14 ..... Dec 1

TOLL FACILITIES

FHWA clears higher NYC area tolls to help finance mass transit. p15 ..... Aug 18
Three major toll routes remain in default, map,**. p20 ..... Oct 13
Ind., Tex. officials bidding sad adieu to tollroad debt. p18 ..... Nov 10
Pa. ponders buying an Interstate,*. p13 ..... Dec 1
Toll boost on Chicago's ailing Calumet Skyway may swell maintenance fund. p43 ..... Dec 22

TRAFFIC

Easing Riyadh's traffic tie-ups. B p17 ..... Dec 1

TRAMWAYS, see: CABLES; TRANSPORTATION

TRANSPORTATION, see also: HIGHWAYS; MASS TRANSIT; RAILROADS

Bay Area Rapid Transit District job — see: CITIES, San Francisco.

Southern California Rapid Transit District job — see: CITIES, Los Angeles.

Metropolitan Atlanta Rapid Transit Authority — see: CITIES, Atlanta.

Transportation inadequacies hamper coal production increases. WO p7 ..... Jul 7
DOT eases no-strike labor pact policy. p14 ..... Jul 7
Cairo mass transit extension may be delayed. B p17 ..... Jul 7
Seoul transit canceled. B p17 ..... Jul 7
Risks kill Md.'s in-house CM plan for Baltimore transit. p11 ..... Jul 14
Gasoline tax for transit, energy R&D. WO p7 ..... Jul 28
Reducing blackout problems. e p72 ..... Jul 28
and RC p4 ..... Dec 8
Parsons takes Baltimore subway CM contract. CW p3 ..... Aug 11
Minn. engineers win fight for top MDOT jobs. p50 ..... Aug 11
FHWA clears higher NYC area tolls to help finance mass transit. p15 ..... Aug 18
Denver: No-strike transit pact. p84 ..... Aug 18
DOT slowly begins reorganization,*. p14 ..... Aug 25
Water floods D.C. Metro as three seals fail. p13 ..... Sep 1
London subway ties together airport, seven existing lines, map, drawing,**. p16 ..... Sep 1
Flooding probes begin as D.C. Metro reopens. CW p3 ..... Sep 8
UMTA continues stress on low-cost transit systems. WO p7 ..... Sep 8
Mexico City rail to cost $1.75 billion. p15 ..... Sep 8
Tehran awards first contract on transit system. p15 ..... Sep 15
DOT takes on Saudi hwys. p16 ..... Sep 15
San Diego rail plan shuns federal funds. p18 and e p80 ..... Sep 15
ARTBA steers new transp course,*. p25 ..... Sep 15
Adams rolls out mass transit plans,*. p40 ..... Sep 22
ABC chapter seeks showdown on Baltimore agreement. p42 ..... Sep 22
Judge refuses to stop progress on Phila rail tunnel. p46 ..... Sep 22
Precast concrete girders chosen for Miami's elevated. p13 ..... Sep 29
Tax increases add weight to Md.'s transp budget. p14 ..... Sep 29
Caracas expands transit plan. p16 ..... Sep 29
Bond-swap plan would keep Port Authority of NY/NJ in mass transit. p39 ..... Oct 6
Rail transit knocked on energy use. p41 and e p148 ..... Oct 6
and RC p5 ..... Dec 15
Billions for Iraq transp. B p50 ..... Oct 6
Transit officials slam CBO report on energy use as inaccurate. p17 ..... Oct 13
and RC p5 ..... Dec 15
Transit aid rolls into New York for subways, buses, commuter RR. p21 ..... Oct 13
San Fran: traveling forms roll over streetcar tracks to cast station in hill, drawings,**. p22 ..... Oct 13
Hong Kong sets dates for subway extension. CW p3 ..... Oct 20
Transit officials reassured on aid at APTA meeting,**. p13 ..... Oct 20
Excessive deflection hits concrete canopies at D.C. rail station,*. p16 ..... Oct 20
Transp. goals still a mixed bag. p14 ..... Oct 27
Seoul subway back on track. p18 ..... Oct 27
Phila.-Lindenwold, N.J. high-speed transit plans move into design phase. p13 ..... Nov 3
Chicago Crosstown Expressway funds switched to transit needs. p15 ..... Nov 3
Nine vie for Baltimore subway station project, unit prices. p59 ..... Nov 10
Baltimore delays mass transit planning. p22 ..... Nov 17
Phila commuter rail tunnel opponents back in court. B p29 ..... Nov 17
Hong Kong plans $4.2 billion transport scheme, map,*. p45 ..... Nov 17
Tehran digs in on first leg of transit system. p15 ..... Nov 24
Budapest subway builders fight soil, water, sewers, drawing, map,**. p24 ..... Nov 24
DOT pushes for I-state cut-off, table,**. p8 ..... Dec 1
WMATA renews Bechtel's CM contract. p10 ..... Dec 1
Miami's transit must pass voters. p11 ..... Dec 1
Canada eyes Mexican transit projects, map. p15 ..... Dec 15
Huge Les Halles station ties together Paris transit, drawing, map,**. Cover and p18 ..... Dec 15
Tandy Center, Fort Worth, has own rapid transit system,*. p23 ..... Dec 15
Phila.'s old el defies destruction attempt,**. p39 ..... Dec 22
Treasury kills Port Authority of NY/NJ mass transit financing plan. p45 ..... Dec 22
Miami gets additional UMTA funding, map. p45 ..... Dec 22
DOT studies remote sensing techniques to survey wetlands for road construc. p56 ..... Dec 22

TRUSSES, see: BEAMS, GIRDERS, TRUSSES

TUNNELS

Chicago MSD deep tunnel bid high again. CW p3 ..... Jul 7
Second Norfolk bridge-tunnel. B p21 ..... Jul 21
Missile X tunnel project digs in. CW p3 ..... Aug 18
MBTA minority set-aside KO's low bid for Boston's South Cove tunnel. p15 ..... Aug 18
Perini case heads for trial; disputes minority set-aside on Boston South Cove tunnel job. p12 ..... Sep 8
Judge refuses to stop progress on Phila rail tunnel. p46 ..... Sep 22
Chesapeake Bay Bridge-Tunnel: three major toll routes remain in default, map,**. p20 ..... Oct 13
Denver suburb proposes tunnel for coal train traffic. p21 ..... Oct 13
Pentagon presses Missile X development,*. p11 ..... Oct 20
Phila commuter rail tunnel opponents back in court. B p29 ..... Nov 17
NCTT proposes method to resolve tunnel disputes. p12 ..... Dec 1

• Foreign

Hong Kong plans $4.2 billion transport scheme, map,*. p45 ..... Nov 17
Japan: Flexible support system solves rock woes at Nakayama Railway tunnel,**. p30 ..... Jul 14

U

UNDERGROUND CONSTRUCTION, see also: TUNNELS, SOIL

Nagoya Central Park shops and trains share subgrade site,*. p15 ..... Jul 7
Rock Store '77, Stockholm meeting, told underground storage saves energy. p16 ..... Sep 29
and e p80 ..... Oct 13
Subterranean design for energy-efficient Sacramento State Office wins competition,*. p14 ..... Oct 13

UNDERPASSES, see: TUNNELS

UNDERWATER CONSTRUCTION AND OPERATIONS; see: NAVY

UNIT PRICES, see: CONSTRUCTION BUSINESS

URBAN AFFAIRS, URBAN RENEWAL, see: CITIES

U.S., see: AIR FORCE; CONGRESS; ENGINEERS; NAVY, etc.

UTILITIES, see also POWER

Carter energy message puts utilities in quandary. p11 ..... Jul 7
Costs continue to rise. p97 ..... Sep 22
N.C. utilities will bill for 1987's costs in 1979. p11 ..... Dec 1
Pa. utility hot line for quick location of buried lines. p16 ..... Dec 1
Western utilities push standard coal plant design. p10 ..... Dec 15

V

VENTILATION, see: AIR CONDITIONING, VENTILATION

VIADUCTS, see: BRIDGES

VIETNAM, see: INTERNATIONAL

W

WALLS AND PANELS, see also: RETAINING WALLS

Prefab brick panels double as formwork to slash costs at Dallas college,**. p28 ..... Oct 13

WATER POLLUTION, see also: HEALTH & ENVIRONMENT; SEWAGE

EPA funds studies to halt N.Y. sludge dumping. p15 ..... Jul 7
Disparate groups urge unity on clean water. p13 ..... Jul 14
Ford to pay Mich $1.6-m. for pollution. CW p3 ..... Jul 21
U.S. behind in program to clean up Great Lakes. p13 ..... Jul 28
Ill. suit forces faster Milwaukee wastewater cleanup. p11 ..... Aug 11
Senate passes Clean Water Act. p12 ..... Aug 11
L.A. ordered to comply with ocean sludge disposal schedule. p20 ..... Aug 18
EPA sues L.A. over Hyperion plant modification delay. CW p3 ..... Aug 25
Water bill difference may cause stalemate in conference. WO p7 ..... Sep 1
Colorado R. pollution suit seeks EPA control of salinity. p13 ..... Sep 1
EPA pledges $1-billion for Boston harbor cleanup. p15 ..... Sep 8
Don't drink wastewater. RC p20 ..... Sep 22
Most states commit available water cleanup funds. p39 ..... Sep 22
Sympathy strike results in San Fran pollution fine. CW p3 ..... Sep 29
Ill., Milwaukee clash on plant cleanup. p14 ..... Sep 29
Special Report—Cleanup effort: a brighter future. Cover, p69 and e p148 ..... Oct 6
Intricate regional water cleanup plans evolve slowly. p70 ..... Oct 6
WPCF head presses research,*. p83 ..... Oct 6
EPA orders planning priority for land disposal of wastes,**. p10 ..... Oct 13
Battle lines drawn in water pollution act rematch. p11 ..... Oct 13
House vote prohibits sludge dumping after '81. CW p3 ..... Oct 20
Do we overspend on environment? e p88 ..... Oct 20
and RC p4 ..... Dec 15
EPA begins crackdown on federal agency pollution. WO p7 ..... Oct 27
Snail darter massacre at Tellico Dam. p13 ..... Nov 3
Milwaukee agrees to Lake Michigan water cleanup. CW p3 ..... Nov 17
Clean water amendments set,** p12 ..... Nov 17
and photo correction RC p8 ..... Dec 22
EPA enforcement plan takes profit from pollution. p10 ..... Dec 8
EPA exacts stiff agreement, record pollution fine from Memphis. p11 ..... Dec 8
High court takes up N.J. ban on out of state waste dumping. p17 ..... Dec 8
South African pollution. B p19 ..... Dec 8
Satellite spots water pollution where sampling methods fail. p11 ..... Dec 15

WATER RESOURCES see also: DAMS; IRRIGATION; LAKES; POWER; RIVERS

Water Quality — see: WATER POLLUTION

Carter water conservation proposal could trim sewage grants. CW p3 ..... Jul 7
Nuclear submarines proposed to push icebergs to parched areas. p14 ..... Jul 7
Filtration plant fire slashes water supply in D.C. suburbs. CW p3 ..... Jul 14
Natl water policy seeks tight use, funding reins,**. p10 ..... Jul 21
Saudis seek Indian water. B p21 ..... Jul 21
Conferees dump nine water projects,**. p8 ..... Jul 28
and RC p10 ..... Nov 17
Carter continues fight against water projects on hit list. WO p7 ..... Aug 18
Egyptian aquifer discovery brightens future. CW p3 ..... Sep 8
Don't drink wastewater. RC p20 ..... Sep 22
Outsider names BuRec top eng,*. p43 ..... Oct 6

Industrial dumps threaten groundwater. p69 .. Oct 6
Major water projects jeopardized. p9 ..... Oct 20
Water from icebergs. e p88 ..... Oct 20
Peru studies irrigation, water supply, power. p20 ..... Nov 10
Corps' Northeast water supply plan proposes over $7 billion in jobs, map. p12 ..... Nov 24
Israel studies Mideast water-sharing plan, map. p12 ..... Dec 8
Carter aides hassle over water project controversy. WO p7 ..... Dec 15
Supreme Court will rule on western water fight. p14 ..... Dec 15
Conserving irrigation water is aim of interagency study. p40 ..... Dec 22
Cost pressures ease for water jobs. p101 ..... Dec 22

• Aqueducts, Reservoirs
Modified boring machine makes up lost time in bad rock at Buckskin Mt. water tunnel, map,**. p18 ..... Jul 7
and RC p4 ..... Jul 28
Mexican aqueduct challenges high sierra, map,**. Cover and p18 ..... Aug 11
Low bidder 19% below estimate for Colo. water diversion system, unit prices. p77 ..... Aug 18
Portugal: moles drive through rock to open water link to Sines industrial site,*. p17 ..... Aug 25
Hartford tunnel extension biggest job for New England Corps. p14 ..... Sep 1
Tarbela reservoir filled to the brim. CW p3 .... Sep 15
D.C. plans underground treated drinking water reservoir. B p18 ..... Sep 15
Mojave Desert flood cuts off L.A. water supply from Colorado R. Aqueduct. p47 ..... Sep 22
Nurek's reservoir creates a seismology lab, map. p53 ..... Sep 22
NYC Third Water Tunnel fire takes job's 17th life. p11 ..... Oct 20
and RC p5 ..... Dec 8

• Treatment
Saudi port has record-size desalting plant. p12 Aug 25
D.C. plans underground treated drinking water reservoir. B p18 ..... Sep 15
Desalting trend set at record 95-mgd Yuma, Ariz. plant,*. p11 ..... Nov 3
Yuma, Ariz. desalter squabble. B p56 ..... Dec 22
Japanese get Jubail desalter, generator award. B p56 ..... Dec 22

• Waste Water Reclamation
Calif. will increase wastewater reclamation. p13 ..... Oct 20
Interior makes water recycling R&D grants. p15 Oct 27

• Waterworks, Water Mains
Low bidder 30% below D.C. force main estimate, unit prices. p64 ..... Jul 21

WATERWAYS, see: CANALS; RIVERS

WEATHER
Roads generally fare well during heat wave p16 Aug 4
ERDA super turbine propels federal wind energy program. p19 ..... Aug 4
Damage in Taiwan typhoons. B p17 ..... Aug 11
NYC Citicorp, Boston Hancock: Dampers (TMDs) steady sway of skyscrapers in wind, drawing,**. p28 ..... Aug 18
and RC p10 ..... Nov 17
Pa.: heavy rains, poor soil force internal sewer repair. p20 ..... Aug 25
Typhoons not that super. RC p5 ..... Sep 29
Corps into Pacific Northwest wind power. B p50 ..... Oct 6
Cables, jets may still bldg sway. p21 ..... Oct 13
Utah winterizing hwy markers. p18 ..... Oct 27
NOAA preparing midrange weather forecasts for construc. WO p7 ..... Dec 22

WELDING
Welder certification program grows. p57 ..... Aug 4
Probe widens for faulty electroslag welds. drawing,*. p10 ..... Aug 18
and e p72 ..... Aug 25
and RC p4 ..... Nov 3
Faulty weld cited in Pa. powerplant explosion. p16 ..... Aug 18
Crack, weld problems shut W. Va.'s Silver Bridge,*. p10 ..... Sep 15
and RC p4 ..... Dec 15
CERL's weld quality monitor would cut inspection costs,*. p21 ..... Dec 1
Australia: welder frees oxygen, hydrogen from H_2O. p16 ..... Dec 15

WHARFS, see: PORTS AND HARBORS

WIND, see: ACCIDENTS; WEATHER

WIRE, see: CABLES, WIRE

WOOD, see: LUMBER

Z

ZONING, see also: BUILDING CODES; CITIES; PLANNING

Commission on bldg codes, zoning and land taxation policies — see: PLANNING.
House buries coastal zone legislation. CW p3 .. Nov 3
D.C.'s Georgetown cleared for high-rise development. p24 ..... Nov 17

Part II

NAMES

AFB COMBUSTION ASSOCIATED, INC., New York and Boston
New firm concentrates on coal combustion. p15 ..... Dec 1
ABRAMS, PHILIP
AGC, ABC, NAHM attack labor law reform bill,**. p57 ..... Sep 15
ACTIVE FIRE SPRINKLER CORP., Brooklyn, N.Y.
Combined bar joist and sprinkler system, Hydra-Strut, cuts cost, drawings. p29 ..... Aug 18
ADAMS, BROCK
DOT slowly begins reorganization,*. p14 ..... Aug 25
Rolls out mass transit plans,*. p40 ..... Sep 22
Transit officials reassured on aid,**. p13 ..... Oct 20
DOT pushes for I-State cut-off, table,**. p8 ... Dec 1
ALCAN PIPELINE CO.
Top job open. CW p3 ..... Sep 29
ALLIS-CHALMERS CORP., Milwaukee, Wis.
Profits up this year. p17 ..... Jul 21
ALM, ALVIN L.
Gets DOE policy and evaluation post. p48 .... Sep 22
Old hands direct new energy office. p12 ..... Nov 3
ALTEMOSE CONSTRUCTION CO., Center Square, Pa.
Fights to keep picketing ban,*. p43 ..... Oct 6
AMERICAN TELEPHONE AND TELEGRAPH CO.
Announces record construc plans. CW p3 ... Dec 15
AMQUIP CORP., Cornwall Heights, Pa.
Dealer swaps cranes for antifreeze, Jello. p17 Aug 4
ANASTASI BROTHERS CORP., Philadelphia, Pa.
Debarred for not meeting hiring goals. p11 ... Sep 1
Reinstated for federal work. CW p3 ..... Dec 1
ANDERSON, H.E.B.
Top 500 corrections. RC p4 ..... Nov 3
ANDERSON, WILLIAM O.
NLRB: union can't discipline boss. p92 ..... Nov 17
ANDRUS, CECIL D.
Natl water policy seeks tight use, funding reins,**. p10 ..... Jul 21
ARDITO-BARLETTA, NICOLAS
Misleading implication. RC p10 ..... Nov 17
ARMCO STEEL CORP., Middletown, Ohio
Price relief for builders. p15 ..... Sep 1
ARMSTRONG, EUGENE
M-K: planning for tomorrow,**. p32 ..... Nov 17
ARULANANDAN, KANDIAH
Computerized probe predicts soil behavior during quakes. p13 ..... Dec 15
AUSTIN COMMERCIAL INC., Dallas, Tex.
Open shop "gamble" pays off for developer,**. p20 ..... Oct 27

BABCOCK AND WILCOX CO., New York, N.Y.
Being bought by McDermott. p14 ..... Sep 1
BAKER, MAURY
Wants to hear from Inter-American hwy builders. RC p10 ..... Nov 17
BAKKE, ALLAN
Reverse bias suit nears Supreme Court hearing. p42 and e p206 ..... Sep 22
Multiple suits challenge validity of minority quotas,**. p73 ..... Oct 20
BARKER, BERNARD
Watergate burglar gets Miami inspector's job. CW p3 ..... Oct 20
BEAL, ROBERT H.
Loma Linda VA hospital: experience counts. RC p5 ..... Jul 28
BECHTEL, INC., San Francisco, Calif.
Sued for overtime on Alaska pipeline work. p15 ..... Sep 1
WMATA renews CM contract. p10 ..... Dec 1
BECKER, BOB
Air bag foundation planned for Alaska housing on arctic permafrost,*. p14 ..... Sep 15
BECKER, E.
Sinking bldgs. RC p10 ..... Nov 17
BEERY, EDGAR C., JR.
Advertising by professionals. RC p4 ..... Jul 28
BEHLKE, CHARLES E.
Permafrost puzzle. RC p14 ..... Dec 22
BELL, JAMES
Small hydropower. RC p20 ..... Sep 22
BERG, GERALD W.
Convicted for bid-rigging. p63 ..... Nov 10
BERGER, HORST
Team makes fabric tension roofs take off, drawing,**. p28 ..... Nov 10
BERGOLD, HARRY E.
Gets DOE intl affairs post. p48 ..... Sep 22
BINGER, WILSON
Another crash repair program begins at Tarbela Dam, drawing,*. p39 ..... Oct 6
BINGHAM, EULA
OSHA will drop a number of 'nit-picking' standards,*. p55 ..... Dec 15
BIRCH, STEPHEN A.
More on minority contracting. RC p9 ..... Nov 17
E.E. BLACK LTD., Honolulu, Hawaii
Handicapped charges filed by OFCCP. p60 .. Jul 28
BLACK & VEATCH, Kansas City, Mo.
B&V's Gibbs heads ASCE,**. p24 ..... Oct 13
BLUM, LOUIS M.
Simplifying the law. RC p14 ..... Dec 22
BORANS, DAVID P.
Convicted for bid-rigging. p63 ..... Nov 10
BOTSAI, ELMER E.
New AIA chief urges competence,*. Cover and p23 ..... Dec 8
BOWLER, THOMAS J.
Chicago hwy contractors guilty of bid-rigging, fraud. p15 ..... Nov 10
BRIENZA, PAUL J.
N.J. contractors ask unions for voluntary wage freeze. p44 ..... Oct 6
BRIGHTON BUILDING & MAINTENANCE CO., Chicago, Ill.
Hwy contractors guilty of bid-rigging, fraud. p15 ..... Nov 10
BROUDER, N.W.
On-the-job education. RC p9 ..... Jul 21
BROWN, YULL
Welder frees oxygen, hydrogen from H_2O. p16 Dec 15
BROWN & ROOT, INC., Houston, Tex.
Marine activities probed by grand jury. B p17 . Dec 1
BRYNAC, MICHAEL J.
Continuing education. RC p4 ..... Dec 15
BULL, EDWIN
Bribery convictions bring stiff sentences. p45 . Dec 22
BURKHARDT, FRANCIS X.
Labor Dept reassures NCIC on construc committee aims,*. p14 ..... Aug 18
BURKI, NAVEED K.
Causes of sad bridge design state. RC p9 .... Nov 24
BURNS, ARTHUR F.
Unlikely to be reappointed by Carter. p14 .... Sep 15
BURNS, DONALD R.
OPEC: energy economics. RC p9 ..... Nov 24
BURTON, JOSEPH A.
ABC hits minority quotas; releases new member survey,*. p53 ..... Nov 3
BUSH, ROBERT Y.
San Onofre A-plant confusion. RC p20 ..... Oct 6

CAMPBELL, SANDERS
Open shop "gamble" pays off for Dallas developer,**. p20 ..... Oct 27
CAMPBELL, WILLIAM C.
More on minority contracting. RC p9 ..... Nov 17
CARLETON, WILLIAM A.
Lawyers and construc. RC p9 ..... Oct 27
CARTER, JIMMY
$10-billion Alcan gas line gets nod from energy board, map,**. p9 ..... Jul 14
Natl water policy seeks tight use, funding reins,**. p10 ..... Jul 21
Backs labor law reform. p13 ..... Jul 21
Conferees bump breeder, nine water jobs,**. p8 ..... Jul 28
Continues fight against water projects on hit list. WO p7 ..... Aug 18
Seeks financially painless urban enrichment aids. p13 and e p98 ..... Sep 8
Wants 10% minority business requirement met,*. p9 ..... Sep 1
U.S., Canada clear $14-billion Alcan gas line, map,**. p9 and e p80 ..... Sep 15
Unlikely to reappoint Burns. p14 ..... Sep 15
Backs pipelines to move Alaskan oil from West Coast. p42 ..... Sep 22
Coal plan faces mounting doubts in Congress. WO p7 ..... Sep 29
Probably will recoup on energy setbacks. WO p7 ..... Oct 6
Studies Rx for steel firms' ills. p15 ..... Oct 13
Still wants to restrict building in flood plains. WO p7 ..... Oct 20
Imprint will be on Congress' energy plan. WO p7 ..... Nov 3
Vetoes Tenn. breeder funds. p14 ..... Nov 10
Endorses full-employment bill. p16 ..... Nov 24
Promises more federal aid for R&D. WO p7 .. Dec 1
Backs force account rules,*. p10 ..... Dec 1
White House spurs dam inspection,**. p9 .... Dec 8
and e p72 ..... Dec 15
Plan offers boost to sagging steel industry,**. p9 ..... Dec 15
Congress faces key construc issues in '78,**. p38 ..... Dec 22
CATERPILLAR TRACTOR CO., Peoria, Ill.
Getting own coal gasification plant. B p17 .... Jul 4
Profits up this year. p17 ..... Jul 21
World's largest tractor unveiled,*. p39 ..... Sep 22
Sales climbing. CW p3 ..... Oct 27
CEDERGREN, HARRY R.
Auburn Dam risks. RC p4 ..... Nov 3
CHILTON, DONALD W.
Oil storage costs: correcting a correction. RC p5 ..... Oct 13
CLEVENGER, WILLIAM A.
ACEC seeks better image to fight price competition,*. p135 ..... Oct 6
CLOUD, BRUCE B.
Zachry grows on ideas that work,**. p18 ..... Dec 1
CLUFF, LLOYD S.
Auburn Dam risks. RC p2 ..... Nov 3
CONSTRUCTION CITY CORP., Mamaroneck, N.Y.
NLRB unmasks illegal picketing. p55 ..... Dec 1
CONSULTANTS NETWORK, INC., Newport Beach, Calif.
Sprayed concrete system raises a house a day,**. p25 ..... Nov 10
COOKE, H.B.
Viewpoint: How to succeed in business: making it to mgmt. p59 ..... Dec 22
J.M. CORBETT CO., Chicago, Ill.
Hwy contractors guilty of bid-rigging, fraud. p15 ..... Nov 10
CORNELL, RALPH
Former Del. official pays $50,000 in settlement. p48 ..... Oct 6
COSTLE, DOUGLAS M.
EPA enlists Corps to manage sewage plant construc,*. p10 ..... Sep 29
EPA orders planning priority for land disposal of wastes,** p10 ..... Oct 13
COTTINE, BERTRAM
Nominee to OSHA review panel may bring pro-labor tilt. WO p7 ..... Sep 15
COUNTS, J. CURTIS
Plans to leave CMA in December. p92 ..... Nov 17

COUPE, RODGER, JR.
Continuing education is costly. RC p5 ..... Sep 22
and RCs p4 ..... Dec 15
COX, WILLIAM M.
I-state completion plans could change funding,*. p13 ..... Aug 4
CRAIG, A.H.
Kissimmee R. controversy. RC p20 ..... Oct 6
CRANDALL, LEROY
Lessons from sinking Calif. courthouse RC p11 ..... Sep 22
and RC p9 ..... Nov 24
CRAWFORD, DUFFER B.
Floating gas plants feasible, Dusseldorf conf. told. CW p3 ..... Sep 1
CREEGAN, PATRICK J.
Managua quake recovery,*. RC p5 ..... Oct 6
CROSS, EDWARD
NYC Water Tunnel No. 3 unions cooperative. RC p5 ..... Dec 8
CROWN-TRYGG CORP., Joliet, Ill.
Acquitted of bid-rigging, fraud. p15 ..... Nov 10
CROWN ZELLERBACH CORP.
OFCCP free to set contract terms (La.). p175 . Dec 22
CULPEPPER, FRED C., JR.
NCA chief says problems are tied to politics,**. Cover, p20 and e p70 ..... Sep 1
CUTTS, JAMES M.
Capitol West Front: repair, don't extend. RC p26 ..... Oct 6

DANIEL CONSTRUCTION CO., Greenville, S.C.
Payroll padding charged on S.C. Parr nuclear plant job. CW p3 ..... Sep 8
No-strike pact doesn't bar sympathy actions. p58 ..... Oct 13
Effort to block union drive draws NLRB fire. p53 ..... Dec 15
Court says OSHA doesn't protect workers who refuse dangerous jobs. p56 ..... Dec 15
DANIELS, ORVAL W.
Sinking bldgs. RC p4 ..... Dec 1
DAY & ZIMMERMANN, INC., Philadelphia, Pa.
New look, chart,**. Cover and p16 ..... Nov 3
DEGENKOLB, HENRY J.
Congress okays $210-m for earthquake research,*. p13 ..... Sep 15
Funding for earthquake eng seminars. RC p9 . Nov 24
DELEUW, CATHER & CO., Chicago, Ill.
Parsons to buy firm. p58 ..... Jul 28
DEUTCH, JOHN M.
Old hands direct new energy office. p12 ..... Nov 3
DIBNER, DAVID R.
Architect heads GSA's PBS. p43 ..... Dec 22
DICARLO, JOSEPH G.
How a union leader became open shop subcontractor,*. p24 ..... Oct 27
DICARLO, JOSEPH J.
Court upholds CM extortion convictions. p11 . Dec 1
DOE, ROBERT A.
Clean water amendments set,**. p12 ..... Nov 17
DOLE CO., THE, Bangor, Me.
Contractor illegally dumped union. p51 ..... Sep 29
DONNEL, LOGAN L.
Lawyers and construc. RC p9 ..... Oct 27
and RC p4 ..... Dec 1
DRESSER ENGINEERING CO., Tulsa, Okla.
May be bought by McKee. p16 ..... Aug 18
DUNICAN, PETER
Structural engineering has social, political implications. e p80 ..... Oct 13

ELIASON, KAY
Key Alaska pipeline men start own company. p54 ..... Nov 3
ELIGATOR, MORTON H.
BART settlement: reason for caution. RC p5 .. Oct 13
ELKOW, MILTON O.
Cracked girder on I-79. RC p4 ..... Nov 3
A theory on weld cracks. RC p4 ..... Dec 15
ENGELBRECHT, RICHARD S.
WPCF head presses research,*. p83 ..... Oct 6
ESPY, ISAAC P.
Lawyers and construc. RC p9 ..... Oct 27
EWART, HOWARD L.
Oil storage costs. RC p30 ..... Dec 22

FAILS MANAGEMENT INSTITUTE, Raleigh, N.C.
Contractor merger-acquisition service. p52 .. Sep 29
FAIRMOUNT FOUNDRY, Cranston, R.I.
Failure worries R.I. economic officials. p19 ... Nov 17
FAISAL, PRINCE MOHAMED AL-
Water from icebergs. e p88 ..... Oct 20
FARR, WALTER G., JR.
Minority contracting: AGC is wrong. p8 and e p64 ..... Sep 29
FINGER, JUSTIN J.
Antiboycott rebuttals. RC p9 ..... Jul 21
FIRTH, G.M., Bradford, England
British eye possible steel fraud. p20 ..... Nov 10
FISCHBACH, HENRY F.
Dead at 85. CW p3 ..... Sep 15
FLOATING BREAKWATERS, LTD., Chichester, England
Scotland's floating prestressed breakwater zigzags to beat waves,**. p12 ..... Sep 29
FLOR, JOHN C.
More on minority contracting. RC p9 ..... Nov 17
FLUOR CORP., Irvine, Calif.
Earnings up 16.3%. p178 ..... Dec 22
FLUOR CORP., Los Angeles, Calif.
Standardized A-plant okayed. p15 ..... Sep 8
FLUOR ENGINEERS AND CONSTRUCTORS, Los Angeles, Calif.
Builds a Saudi HQ,*. p13 ..... Sep 29
FLUOR OCEAN SERVICES, INC.
To design, manage LOOP marine work. CW p3 ..... Sep 8

FONDEDILE, S.A.
Calif.: Italian pile system supports slide,*. p16 Nov 24
FORD, BACON & DAVIS, INC., New York, N.Y.
Culpepper's a FBD man,*. p21 ..... Sep 1
FORD MOTOR CO.
To pay Mich. $1.6-m for pollution. CW p3 .... Jul 21
Egyptian venture may ease Arab boycott. CW p3 ..... Nov 3
FOWLER, WILLIAM
Key Alaska pipeline men start own company. p54 ..... Nov 3
FRANZEN, MELVYN H.
Roots of Sydney M.L.C. Centre forming innovation. RC p28 ..... Oct 6
FREEMAN, S. DAVID
New TVA chief pushes bold energy reform,**. p20 ..... Oct 20
FRIEHAUF, GARY R.
Water job benefits. RC p10 ..... Nov 17
FROHLING, EDWARD S.
Mining pays off for Tucson's Mountain States,**. Cover and p60 ..... Dec 22
FURNCO CONSTRUCTION CORP., Gary, Ind.
Supreme Court ruling may clarify antibias law compliance (Chicago). p178 ..... Dec 22

GALLAGHER, RICHARD
Mass transit saves energy. RC p5 ..... Dec 15
GANTS, ROBERT M.
Tax reform: construc asks relief,*. p10 ..... Sep 15
GEIGER BERGER ASSOCIATES, P.C., New York, N.Y.
Team makes fabric tension roofs take off, drawing,**. Cover and p28 ..... Nov 10
GEIGER, DAVID
Team makes fabric tension roofs take off, drawing,**. Cover and p28 ..... Nov 10
GENGE, INC., Los Angeles, Calif.
A-E firm reorganizes, will get new pres.,*. p83 Sep 8
GEORGINE, ROBERT A.
Bldg trades list minority gains,*. p17 ..... Jul 21
Labor Day talk: who are our friends? p84 .... Sep 8
Attacks Roundtable at ASCE meeting. p17 .... Oct 27
Construc groups zero in on proposed female quotas,**. p8 ..... Nov 3
Bldg trades launch organizing drive,**. p8 and e p80 ..... Dec 8
GEVYN CONSTRUCTION CORP., Mamaroneck, N.Y.
Mass.: Middlesex courthouse $16-m price tag tripled,*. p25 ..... Aug 11
GHANI, ABDUL
Tarbela bucket designers. RC p5 ..... Nov 10
GIBBS, WILLIAM R.
Brings professionalism to ASCE,**. Cover and p24 ..... Oct 13
ASCE Viewpoint: let's not deep-freeze so much of Alaska, map. p24 ..... Dec 8
GIFFELS ASSOCIATES, INC., Detroit, Mich.
Seeks $10-billion Indonesian plan. CW p3 ... Oct 13
GILBANE BUILDING CO., Providence, R.I.
Govt eyes 1980 Olympics CM bill. p14 ..... Jul 14
GOLDSTEIN, JAMES
ENR on architects. RC p5 ..... Jul 7
GOULD, RICHARD H.
Dies at 88. p17 ..... Nov 10
GRAHAM, LLOYD K.
Grand jury probe leads to conviction. CW p3 . Dec 8
GRAMOLL, ROBERT
Minority set-asides opposed. RC p4 ..... Dec 8
GRANDE, OTTAVIO F.
Convicted for bid-rigging. p63 ..... Nov 10
GRANT, ARVID
Blasts U.S. bridge design art,**. Cover and p26 ..... Aug 18
and RC p14 ..... Oct 6
GRAY, JAMES E.
Minority set-asides. RC p25 ..... Dec 22
GREENFIELD, SEYMOUR S.
Designers race against time to get oil into salt domes,**. p16 ..... Oct 13
GROENEVELD, R.L.
Portuguese port alternative. RC p12 ..... Dec 22
GRUBBS, JOHN D.
Continuing education. RC p8 ..... Aug 4
GULINO, ROBERT J.
Found guilty by grand jury in bridge testimony. p13 ..... Oct 20
Sentenced for perjury. CW p3 ..... Nov 24
GUY, LOUIS L., JR.
Compromise with DOJ impossible. RC p5 .... Sep 15

HALLIBURTON CO., Dallas, Tex.
Offers to buy NUS Corp. for $10-m. p54 ..... Dec 15
HAMNER, W. EASLEY
Fine tuning Citicorp,*. RC p10 ..... Nov 17
HANSON, DANIEL J.
ARTBA steers new transp course,*. p25 ..... Sep 15
HARNISCHFEGER CORP., Milwaukee, Wis.
Moves to take over a competitor. p48 ..... Oct 6
HARRIS, PATRICIA R.
White House bars new twists for some old programs,**. p38 ..... Sep 22
$12.4-billion housing bill favors old, ailing cities,*. p38 ..... Oct 6
HUD block grant rules draw fire,*. p15 ..... Nov 10
HAUGEN, DAVID
Key Alaska pipeline men start own company. p54 ..... Nov 3
HAYS, JAMES E.
CERL's research pays off on army projects, chart,**. p20 ..... Dec 1
HEYNING, H.W.L.
Iran port consultant correction. RC p8 ..... Aug 4
HICKS, WILLIAM L.
More on minority contracting. RC p9 ..... Nov 17
HINES, GERALD D.
Houston developer eyes Penn's Landing. CW p3 ..... Nov 3

HIRSCH, MORTON
Combined bar joist and sprinkler system, Hydra-Strut, cuts cost, drawings. p29 ..... Aug 18
HOGAN, EDWARD M.
Construc groups zero in on proposed female quotas,**. p8 ..... Nov 3
HOGAN, LAWRENCE J.
Concedes Korean contrib. CW p3 ..... Aug 25
HOGAN-SCHOCH AND ASSOCIATES, Santa Rosa, Calif.
Surveyors win decision on prevailing wage rate issue. p60 ..... Sep 15
HOLLERAN, CLIFFORD A.
Re BART settlement: in defense of defenders. RC p28 ..... Sep 22
HOWARD ELECTRIC AND MECHANICAL COS., Denver, Colo.
Joins NCA. p58 ..... Sep 15
HOWARD, JAMES J.
Transit officials reassured on aid,**. p13 ..... Oct 20
HOWDYSHELL, PAUL
CERL's Kelly-Vail rapid concrete test,* p20 ... Dec 1
HOWELL, ROBERT D.
Banks' project financing. RC p4 ..... Oct 6
HUMPHREY, HUBERT H.
Full employment measure may pass as tribute. WO p7 ..... Sep 22

INGERSOLL-RAND CO., Wayne, N.J.
Impact drill drives through hard rock fast. p14 ..... Nov 3
INGRAM, FREDERIC
Bribery convictions bring stiff sentences. p45 . Dec 22

JACOBS ENGINEERING GROUP, Pasadena, Calif.
Hits big in Jordan. B p29 ..... Nov 17
Forms advisory group. p56 ..... Dec 15
JANICKI, VALENTINE
Five convicted for Chicago MSD sludge hauling bribes. p18 ..... Nov 17
Bribery convictions bring stiff sentences. p45 . Dec 22
JANSEN, ROBERT B.
Outsider named BuRec top eng,*. p43 ..... Oct 6
JENKINSON, LORNE
Atlantic City rebuilds, bets on its future, map,** p26 ..... Oct 27
JOHNSON, C. DOUGLAS
Minority set-asides. RC p17 ..... Dec 22
JONES, J.A., CONSTRUCTION CO., Charlotte, N.C.
Joins NCA. p58 ..... Sep 15

KAISER ALUMINUM & CHEMICAL
Some affirmative action hiring plans may be illegal. WO p7 ..... Dec 8
KAR, ANIL K.
Roots of Sydney M.L.C. Centre forming innovation. RC p28 ..... Oct 6
KEARNEY, FRANK
CERL's weld quality monitor would cut inspection costs,*. p21 ..... Dec 1
KEITH, STEVE
Labor law reform. RC p14 ..... Dec 22
KHASAT, VIJAY P.
Continuing education. RC p4 ..... Dec 15
Tax rules questioned. RC p28 ..... Dec 22
KING, PAUL J.
Minority contractors protest AGC suits,**. p57 ..... Dec 8
KINSTLINGER, JACK
Antiboycott law merits support. RC p5 ..... Aug 18
KIRKWOOD, RODERICK R.
GSA faulty foundation woes. RC p4 ..... Dec 8
KOEHN, ENNO
Social, environmental rules lift construc costs. p14 ..... Oct 27
KOLTNOW, PETER G.
Mass transit is not a panacea. RC p5 ..... Dec 15
KONA, CHARLES
Atlantic City alliance. RC p5 ..... Dec 15
KREPS, JUANITA
White House bars new twists for some old programs,**. p38 ..... Sep 22
KRUG EXCAVATION CO., Chicago, Ill.
Hwy contractors guilty of bid-rigging, fraud. p15 ..... Nov 10
KRUG, GEORGE B., SR.
Hwy contractors guilty of bid-rigging, fraud. p15 ..... Nov 10

LANCE, BERT
Endorses idea of Federal Office of Construc. p12 ..... Aug 25
LANG, MARTIN
Named v.p. of Camp Dresser & McKee, Inc. B p17 ..... Jul 14
LANKHORST, JACOBUS
Corps asks construc exemption from premerger notification rules. WO p7 ..... Sep 22
LAW, CHRIS, JR.
GSA's faulty foundations a problem; list of bldgs.**. p37 ..... Oct 6
LELAND, GEORGE H.
Lawyers and construc. RC p9 ..... Oct 27
LEWIS, B.A.
"Practice is education" editorial typo. RC p5 .. Aug 11
LILLY, JAMES
M-K: planning for tommorrow,**. p32 ..... Nov 17
LINCK, ROBERT E.
CCE rejects single-voice proposal,**. p11 .... Sep 8
LITTLE, JACK D.
Planning Research gets new officers. p13 .... Sep 1
PRC pres reassigned to former position. p92 . Nov 17
LODIGIANI, GIUSEPPE
Top contractors talk terms with Arabs in Geneva,**. p20 ..... Jul 21
LORE, H. EDGAR
Single voice on labor formed,*. p11 ..... Aug 18
CCE rejects single-voice proposal,**. p11 .... Sep 8
Single-voice industry group may be formed by

Christmas,**. p57 ... Nov 24
LOVELL, DOUGLAS W.
Playboy hotel foundation feat. RC p4 ... Dec 15
LUCKE, WILLIAM N.
GAO report urging suits of A-Es is wrong. RC p5 ... Oct 20
LYNAM, BART T.
Acquitted of bribery. p18 ... Nov 17

MACKENZIE, RONALD C.
Court upholds CM extortion convictions. p11 ... Dec 1
MADDEN, THOS. M., CO., Chicago, Ill.
Hwy contractors guilty of bid-rigging, fraud. p15 ... Nov 10
MAJEWSKI, CHESTER P.
Acquitted of bribery. p18 ... Nov 17
MANTIA, RICHARD
PRIDE program boosts construc in St. Louis,*. p59 ... Dec 8
MARDIROSIAN, ARAM H.
Suspended architect sues AIA. CW p3 ... Jul 28
MARSHALL, F. RAY
Labor Dept plans construc unit,*. p11 ... Jul 14
Says Carter backs OSHA; unveils paper work reduction plan,*. p59 ... Jul 28
Hometown plans slated to go in Labor Dept anti-bias drive,**. p11 ... Aug 4
Davis-Bacon crackdown under way,*. p53 ... Dec 15
MAULIN, JACK D.
M-K: planning for tomorrow,**. p31 ... Nov 17
MCCUBIN, KEATOR
Jacobs not just design firm. RC p4 ... Dec 1
MCCUE, JOHN
Conflict of interest seen in zoo contract. p76 ... Oct 20
Cleared of conflict of interest. CW p3 ... Oct 27
MCDERMOTT, J. RAY, & CO. INC., New Orleans, La.
Buying Babcock and Wilcox. p14 ... Sep 1
Reports "questionable payments." CW p3 ... Nov 24
MCDONALD, WILLIAM H.
Hyatt Regency conservation. RC p4 ... Nov 3
MCINTYRE, JAMES T., JR.
New OMB rules spell out when consultants are to be hired,*. p176 ... Dec 22
MCKEE, ARTHUR G., & CO., Cleveland, Ohio
May buy Dresser Engineering. p16 ... Aug 18
MCKEE-BERGER-MANSUETO, New York, N.Y.
Court upholds CM extortion convictions. p11 ... Dec 1
MCKEE, KEITH E.
Hancock Tower AIA award a joke? RC p5 ... Jul 7
MCLAUGHLIN, J.L.
Model airplane not a "toy." RC p16 ... Oct 6
MCMURREN, WILLIAM H.
M-K: planning for tomorrow,**. p31 ... Nov 17
MCPARTLIN, ROBERT F.
Bribery convictions bring stiff sentences. p45 ... Dec 22
MEADE PAPER CORP., Dayton, Ohio
Land condemnation protested. B p17 ... Jul 7
MEANY, GEORGE
Union membership has fallen 4% in past two years,*. p58 ... Sep 15
and RC p14 ... Dec 22
Unions win House victory on labor law,*. p57 ... Oct 13
MEEKER, DAVID OLAN, JR.
Former HUD man eyed by AIA,*. p17 ... Dec 8
MICHEL, HENRY L.
Designers race against time to get oil into salt domes,**. p16 ... Oct 13
MIZUNO, TETSUTARO
Top contractors talk terms with Arabs in Geneva,**. p20 ... Jul 21
MOOLIN, FRANK, & ASSOCIATES, INC., Anchorage, Alaska
New company. p54 ... Nov 3
and e p88 ... Nov 10
MOOLIN, FRANK P., JR.
Starting own company. p54 ... Nov 3
and e p88 ... Nov 10
MOORHOUSE, DOUGLAS C.
Auburn Dam risks. RC p2 ... Nov 3
MORABITO, BRUNO P.
Energy crisis spotlights ASHRAE and boosts demand for its know-how,*. p16 ... Jul 7
MORRIS, JOHN W.
White House spurs dam inspection,**. p9 ... Dec 8
and e p72 ... Dec 15
MORRIS, RICHARD I.
Likes garbage-to-energy idea. RC p4 ... Dec 8
MORRISON-KNUDSEN CO., INC., Boise, Idaho
Planning for tomorrow,**. Cover and p30 ... Nov 17
MORTMAN, MILTON
Boycott law helps business. RC p9 ... Nov 24
MOSIER, MAURICE L.
New NCA-UA labor contract faces up to open shop,**. p58 ... Jul 28
MOUNTAIN STATES MINERAL ENTERPRISES, Tucson, Ariz.
Mining pays off for Mountain States,**. Cover and p60 ... Dec 22
MULL, MELVIN HENRY
Boston's Hancock AIA award an insult. RC p4 ... Jul 28
and RC p9 ... Nov 24
MURPHY, BERNARD D.
Long live Murphy. RC p4 ... Jul 28
MURRAY, JOHN P.
Lawyers and construc. RC p9 ... Oct 27
MUSKIE, EDMUND S.
Some coal-fired powerplants escape emission requirements,*. p10 ... Nov 3
Clean water amendments set,**. p12 ... Nov 17
MYERS, DALE D.
Nominated for DOE R&D post. p48 ... Sep 22
Old hands direct new energy office. p12 ... Nov 3

NAUMANN, WILLIAM E.
AGC, ABC, NAHM attack labor law reform bill,**. p57 ... Sep 15
NEIMAN-MARCUS, Dallas, Tex.
24-k gold-plated hardhat. B p17 ... Nov 24
NEWMAN, RICHARD G.
Genge reorganizes, will get new pres.,*. p83 ... Sep 8
NIEDERMEYER-MARTIN CO., Portland, Ore.
Air bag foundation planned for Alaska housing on arctic permafrost,*. p14 ... Sep 15
NOGUCHI, ISAMU
Splashy fountain bejewels Detroit civic center plaza,**. p64 ... Oct 6
NORTHEAST ELECTRIC CORP., Bangor, Me.
Contractor illegally dumped union. p51 ... Sep 29
NORTHWEST ENGINEERING CO., Green Bay, Wis.
Harnischfeger moves to take over a competitor. p48 ... Oct 6
NORTON, ELEANOR HOLMES
Sets new course for EECC. p15 ... Aug 4
NUS CORP., Rockville, Md.
Halliburton offers to buy NUS Corp. for $10-m. p54 ... Dec 15

OFFSHORE POWER SYSTEMS, Jacksonville, Fla.
Floating nuclear powerplants will flow from assembly line,**. Cover and p22 ... Nov 24
OKUN, DANIEL A.
Don't drink wastewater. RC p20 ... Sep 22
O'LEARY, JOHN F.
Nominated DOE deputy secy. p48 ... Sep 22
Old hands direct new energy office. p12 ... Nov 3
O'NEILL, THOMAS P.
House energy bill emphasizes conservation, construc,**. p9 ... Aug 11
ORFEI, DANTE J.
Cost of environmental protection. RC p4 ... Dec 15

PAINTER, JOHN H.
MARTA subcontractor jailed. B p17 ... Jul 14
PALUMBO EXCAVATING CO., Hillside, Ill.
Hwy contractors guilty of bid-rigging, fraud. p15 ... Nov 10
PANULLO, JOHN N.
Minority set-asides. RC p17 ... Dec 22
PARKSET PLUMBING AND HEATING CORP., Brooklyn, N.Y.
Davis-Bacon violator pays $110,000. p57 ... Aug 25
PARSONS BRINCKERHOFF QUADE & DOUGLAS, INC., New York, N.Y.
Designers race against time to get oil into salt domes,**. p16 ... Oct 13
PARSONS, THE RALPH M. CO., Pasadena, Calif.
Risks kill Md.'s in-house CM plan for Baltimore transit. p11 ... Jul 14
Plans to purchase two eng firms. p58 ... Jul 28
Takes Baltimore subway CM contract. CW p3 ... Aug 11
PAYNE, JOHN F.
Panama engineering lessons. RC p5 ... Oct 20
PEMBERTON, WILLIAM
Minority contracting: AGC set to challenge public works law,**. p8 ... Sep 29
PÉREZ, CARLOS ANDRES
Venezuela: a big construc market,*. p90 ... Nov 17
PERINI CORP., Framingham, Mass.
MBTA set-aside KO's low bid for Boston's South Cove tunnel. p15 ... Aug 18
Case heads for trial; disputes minority set-aside. p12 ... Sep 8
PERKS, HARRY M.
Day & Zimmermann's new look, chart,**. Cover and p16 ... Nov 3
PETER KIEWIT SONS' CO., Omaha, Neb.
NLRB again approves double-breasted operations. p84 ... Aug 18
PETTERSON, RUSSELL W.
New technology office head. B p19 ... Dec 8
PIZZAGALLI, JAMES
How Vermont went open shop,*. p22 ... Oct 27
PIZZAGALLI, REMO
How Vermont went open shop,*. p22 ... Oct 27
PLANNING RESEARCH CORP., Washington, D.C.
Gets new officers, moves to D.C. p13 ... Sep 1
Price resigns as chmn. p92 ... Nov 17
SEC questions mgmt shift. CW p3 ... Nov 24
POLMA, FRANK
Causes of sad bridge design state. RC p14 ... Oct 6
and RC p9 ... Nov 24
and RC p4 ... Dec 8
Sloppy eng. educ. RC p4 ... Dec 8
POWILLS, CAROL
Minority set-asides. RC p20 ... Dec 22
PRICE, HARRISON A.
Planning Research gets new officers. p13 ... Sep 1
Resigns as chmn at PRC. p92 ... Nov 17
PRILUCK, HERBERT M.
MARTA's construc director resigns. CW p3 ... Oct 13
PUGH, RICHARD
How to discourage lawsuits. RC p4 ... Dec 1

RAY, GORDON K.
More segmental bridges. RC p18 ... Oct 6
REINSTEIN, WILLIAM G.
Indicted for bid-rigging. p63 ... Nov 10
RODERICK, DAVID
Carter plan offers boost to sagging steel industry,**. p9 ... Dec 15
ROE, KENNETH A.
Photo mixup,*. RC p8 ... Dec 22
ROE, ROBERT A.
Clean water amendments set,**. p12 ... Nov 17
and photo correction RC p8 ... Dec 22
ROOSA, ROBERT V.
Fed chief candidate? p14 ... Sep 15
ROSENTHAL, LEON
Lawyers and construc. RC p9 ... Oct 27
ROUGEAU, WELDON J.
Hometown plans slated to go in Labor Dept anti-bias drive,**. p11 ... Aug 4
RUBIN, BERNARD
Embezzler loses job as Fla. union pension trustee. CW p3 ... Oct 13

S.I.P., INC., Houston, Tex.
Parsons to buy firm. p58 ... Jul 28
SAFFIR, HERBERT S.
Typhoons not that super. RC p5 ... Sep 29
SANDIA LABORATORIES, Albuquerque, N.M.
Water-magma mix: hot new fuel idea. p16 ... Dec 1
SANSONE, JOSEPH F.
Single-voice industry group may be formed by Christmas,**. p57 ... Nov 24
SCHLESINGER, JAMES R.
House energy bill emphasizes conservation construc,**. p9 ... Aug 11
SCHUTT, E. MAJOR
Lawyers and construc. RC p9 ... Oct 27
SCOVELL, JOHN F.
Dallas Reunion project not a joint venture. RC p12 ... Oct 6
SEELAND, ALLEN R.
San Onofre A-plant confusion. RC p20 ... Oct 6
SEIM, CHARLES
Bridge engineering is an art. RC p8 ... Dec 22
SERAFIM, J. LAGINHA
Quakes and concrete dams. RC p5 ... Aug 25
and RCs p2 ... Nov 3
SERVOS, KURT
Auburn Dam risks. RC p2 ... Nov 3
SHAFFER, L.R.
CERL's research pays off on army projects, chart,**. p20 ... Dec 1
SHAPP, MILTON J.
Pa. ponders buying an Interstate,*. p13 ... Dec 1
SHAW, ARTHUR D., JR.
Lawyers and construc. RC p9 ... Oct 27
SHEA, RICHARD J.
More on minority contracting. RC p9 ... Nov 17
SHERE, SYED S.
Pakistanis not to blame. RC p6 ... Dec 15
SHIVLER, JAMES F.
Top 500 corrections. RC p4 ... Nov 3
SIMMONS, ROGER W.
Hong Kong wall thickness correction. RC p10 ... Nov 17
SIMON, LEON R.
Contractor not involved in N.C. hwy paving. RC p16 ... Oct 6
SKANSKA CEMENTGJUTERIET, Stockholm, Sweden
Teaches Russians All-Betong on-site casting,**. p63 ... Sep 22
SKIDMORE, OWINGS & MERRILL, Chicago, Ill.
Architect not in construc, says OSHA. p39 ... Sep 22
SMITH, ROBERT J.
ABA procurement code. RC p5 ... Aug 18
Lawyers and construc. RC p9 ... Oct 27
SMITH, WILBUR S.
ARTBA steers new transp course,*. p25 ... Sep 15
SOLOMON, JOEL W. (JAY)
House hearing on A-E selection no threat to Brooks law,*. p50 ... Sep 29
SOUTH PRAIRIE CONSTRUCTION CO.
NLRB again approves Kiewit's double-breasted operations. p84 ... Aug 18
SOUZA, ANTHONY P.
Pleads guilty to fraud. p44 ... Sep 22
SPEER, EDGAR B.
Contractors reap rewards from steel industry problems,*. p87 ... Sep 22
SPENCER, NEAL
M-K: planning for tomorrow,**. p32 ... Nov 17
SPILLER, LARRY N.
Lobbying crackdown may inadvertently include consultants. WO p7 ... Sep 22
SPROUSE, JAMES M.
Says union wounds are self-inflicted. CW p3 ... Aug 11
Carter wants 10% minority business requirement met,*. p9 ... Sep 1
Minority contracting: AGC replies. RC p11 ... Oct 6
and RC p9 ... Nov 17
Construc groups zero in on proposed female quotas,**. p8 ... Nov 3
STARRETT HOUSING CORP., New York, N.Y.
Tops out Iranian high-rises in Farahzad new town,*. p17 ... Oct 27
STEARNS, JAMES C.
Disability coordinator for PBS named. CW p3 ... Oct 20
STEGEMAN, ARTHUR J.
Russian machines for Itaipu. RC p8 ... Aug 4
STENNIS, JOHN
Conferees bump breeder, nine water jobs,**. p8 ... Jul 28
STEPHENS, CARL E.
Minority set-asides. RC p25 ... Dec 22
STORCH, HERBERT
Roe photo mixup,*. RC p8 ... Dec 22
SUNN, FRANKLIN Y.K.
Court finds ASCE guilty of violating consent decree,**. p10 ... Aug 11
Reinstated by ASCE. p13 ... Oct 27
SVERDRUP & PARCEL AND ASSOCIATES, INC., St. Louis, Mo.
To design Vandenberg AFB space shuttle complex. CW p3 ... Sep 15
SWEENEY, PAUL W.
More on Hancock AIA award. RC p9 ... Nov 24

TALLARICO, ROBERT A.
Oil storage doubts. RC p11 ... Sep 22
and RC p5 ... Oct 13
and RC p30 ... Dec 22
THOMPSON, FRANK
Labor law bill wins first round,*. p49 ... Sep 29
THOMPSON, J. NEILS
BRAB executive mgr. B p18 ... Sep 15
THORNE, ROBERT D.
Gets DOE energy technology post. p48 ... Sep 22
Old hands direct new energy office. p12 ... Nov 3

TOMASETTI, RICHARD L.
GSA's faulty foundations a problem; list of bldgs.**. p38 ... Oct 6
TOWER, JOHN
Carter gets bill banning foreign bribery,*. p17 ... Dec 15
TOZER, GEORGE K.
Reinstated by ASCE. p13 ... Oct 27
TRAMMELL CROW CO., Dallas, Tex.
Expansion yields record trade complex. p48 ... Oct 6
TRANS WORLD AIRLINES
Handicapped charges filed by OFCCP. p60 ... Jul 28
TRUDEAU, PIERRE ELLIOTT
$10-billion Alcan gas line gets nod from energy board, map,**. p9 ... Jul 14
U.S., Canada clear $14-billion Alcan gas line, map,**. p9 and e p80 ... Sep 15
TRYON, WILLIAM J.
Solar panel maker for Ala.'s soybean drying facility. RC p6 ... Dec 15
TULLER, JOSEPH
Convicted for bid-rigging. p63 ... Nov 10
TURK, A.R.
Lessons from sinking Calif. courthouse. RC p9 ... Nov 24
TURNER, T. MICHAEL
Don't condemn hometown plans. RC p5 ... Jul 14

URS CORP., San Mateo, Calif.
To acquire Evelyn Wood Reading Dynamics, Inc. p58 ... Oct 13
UNION CONTRACTING AND MATERIALS CO., Hodgkins, Ill.
Hwy contractors guilty of bid-rigging, fraud. p15 ... Nov 10
UNITED AIR LINES
Handicapped charges filed by OFCCP. p60 ... Jul 28
UTILITIES SERVICES ENGINEERING, INC., Denver, Colo.
Picketing intended to force top-down organizing, says NLRB. p60 ... Sep 15

VVKR PARTNERSHIP, Alexandria, Va.
Architect guarantees project cost in writing,*. p40 GO ... Dec 8
VOGEL, HERBERT D.
TVA board appointment. RC p12 ... Dec 22
VOLCKER, PAUL A.
Fed chief candidate? p14 ... Sep 15
VOORHEES, ALAN M.
Leaves consulting for academic career. p14 ... Aug 18

WAGNER, AUBREY J.
TVA chmn to resign,**. p20 ... Oct 20
WAHLER, W.A. & ASSOCIATES, Palo Alto, Calif.
Study of seven new dams for Interior,**. p11 ... Jul 21
WALKER, IRA W.
A-E retainages. RC p10 ... Sep 22
WARD, MARTIN J.
Recession, open shop temper wage pacts,*. p67 and e p82 ... Jul 21
New NCA-UA labor contract faces up to open shop,**. p58 ... Jul 28
WARING, J.R.
Lawyers and construc. RC p9 ... Oct 27
WARNER, GREGORY B.
Oil storage doubts. RC p11 ... Sep 22
and RC p5 ... Oct 13
WEBER, FRANKLIN
Bribery convictions bring stiff sentences. p45 ... Dec 22
WEDEKIND, HANS O.
Hiring addicts and alcoholics. RC p5 ... Aug 11
WESTERN ASPHALT PAVING CO., Hodgkins, Ill.
Hwy contractors guilty of bid-rigging, fraud. p15 ... Nov 10
WHIPPLE, WILLIAM, JR.
Planning water quality systems,*. p29 ... Dec 8
WHITE, KEVIN
"Boston plan" for redevelopment. WO p7 ... Oct 27
WHITTINGHILL, ROBERT E.
Top 500 corrections. RC p4 ... Nov 3
WINDER, R. BAYLY
Contractor-Arab adaptation: two-way street. e p82 ... Jul 21
NYU, not Princeton. RC p5 ... Sep 1
WISDOM, DONALD A.
Kissimmee R. controversy. RC p18 ... Oct 6
Fla. Audubon Soc. award. B p17 ... Nov 24
WISMER & BECKER, Sacramento, Calif.
'Sleeping' worker gets jobless pay. p54 ... Nov 3
WITHERS, JOHN S.
Top contractors talk terms with Arabs in Geneva,**. p20 ... Jul 21
WOOD, EVELYN, READING DYNAMICS, INC., New York, N.Y.
To be acquired by URS Corp. p58 ... Oct 13
WOODHEAD, ROBERT
M-K: planning for tomorrow,**. p32 ... Nov 17
WRIGHT FARMS CONSTRUCTION, INC.
Vt. contractor gets relief from set-aside requirement. CW p3 ... Dec 22

YINGLING, RONALD H.
Minority set-asides. RC p18 ... Dec 22
YOHALEM, MARTIN J.
Antiboycott rebuttals. RC p9 ... Jul 21

ZACHRY, H.B. (BARTELL), JR.
Zachry grows on ideas that work,**. Cover and p18 ... Dec 1
ZACHRY, H.B., CO., San Antonio, Tex.
Grows on ideas that work,**. Cover and p18 ... Dec 1
ZACHRY, H.B. (PAT), SR.
Zachry grows on ideas that work,**. Cover and p18 ... Dec 1
ZWOYER, EUGENE M.
Court finds ASCE guilty of violating consent decree,**. p10 ... Aug 11

Part III

PRODUCT MANUFACTURERS

AMP SPECIAL INDUSTRIES
Solderless terminals. B p84 ... Oct 6
AEROIL PRODUCTS CO., INC., South Hackensack, N.J.
Crack filler. B p33 ... Nov 24
ALISON CONTROL INC., Fairfield, N.J.
Fire safety system. B p33 ... Oct 27
ALLATT, LTD., Downsview, Ont., Canada
Spreaders,*. B p26 ... Nov 3
ALLENITE PRODUCTS CO., Berkeley, Calif.
Scaffold ladder. B p29 ... Dec 15
ALPINE ENGINEERED PRODUCTS, INC., Pompano Beach, Fla.
Machine turns 2 x 4s into trusses. p29 ... Dec 15
ARCAL CHEMICALS, INC., Seat Pleasant, Md.
Dust control. B p26 ... Nov 3
ARMCO STEEL CORP., Middletown, Ohio
Weld wire. B p26 ... Nov 3
ATLAS COPCO INC., Wayne, N.J.
Bits drill through any type soil,*. p37 ... Jul 7
Dry dust system cleans up tunneling,*. p24 ... Aug 25
Roller bits. B p26 ... Nov 3

BALLYMORE CO., West Chester, Pa.
Mobile work platform extendable to 25 ft.,*. p25 ... Sep 29
BETHLEHEM STEEL CORP.
Bridge forms. B p134 ... Sep 22
BILCO CO., THE
Fire vent,*. B p84 ... Oct 6
BINKS MANUFACTURING CO., Franklin Park, Ill.
Bead gun,*. B p56 ... Nov 17
BLAW-KNOX CONSTRUCTION EQUIPMENT, INC., Mattoon, Ill.
Vibrating screed's adjustable width offers flexibility,*. p28 ... Nov 24
BOSTITCH, Toronto, Canada
Truss joint press. B p26 ... Nov 3
BRASCH MANUFACTURING CO., INC., Maryland Heights, Mo.
Baseboard heaters. B p29 ... Dec 15
BRITISH ROPEWAY ENGINEERING CO., Sevenoaks, Kent, England
Aerial conveyor,*. B p33 ... Nov 24
BUILDEX, Elk Grove, Ill.
Insulation fasteners prevent overdriving,*. p25 ... Sep 29

CAMCAR DIVISION OF TEXTRON, INC., Rockford, Ill.
Wire terminals. B p29 ... Dec 15
CAMLEVER, Pomona, Calif.
Concrete buckets. B p56 ... Nov 17
CAMPBELL DETACHABLE CAB CO., Wauconda, Ill.
Air pressurizer. B p55 ... Sep 8
CASE, J.I., Wichita, Kan.
Four wheel drive line layer balances power for cuts. p24 ... Aug 25
CECO CORP., Columbus, Miss.
Roof seams. B p32 ... Oct 13
CHEMPLAST, INC., Wayne, N.J.
Plumbing sealants. B p29 ... Dec 15
COLEMAN, J.E., CO., New York, N.Y.
Aerial conveyor,*. B p33 ... Nov 24
CONENCO CORP., THE, St. Joseph, Mich.
Portable dam. B p33 ... Nov 24
COOPERHEAT, Newport Beach, Calif.
Weld preheaters. B p33 ... Oct 27

DEFIANCE MECHANICAL, Sunnyvale, Calif.
Lubrication trailer,*. B p29 ... Aug 25
DEMAG BAUMASCHINEN GMBH, Duesseldorf, W. Germany
Synchronous display helps guide underwater digging,*. p31 ... Dec 8
DEMCO
Tertiary filters. B p134 ... Sep 22
DOREMUS & CO.
Work platform. B p84 ... Oct 6
DOW CHEMICAL U.S.A., Midland, Mich.
Aluminum makes contoured median barriers light,**. p26 ... Dec 15
DURABLE MAT CO.
Outrigger pads. B p139 ... Sep 22
DURO-LITE LAMPS, INC., Fair Lawn, N.J.
Mercury vapor lamp. B p32 ... Jul 14
DYNAPAC MFG., INC., Stanhope, N.J.
Compactor. B p26 ... Nov 3

EBERHARD MANUFACTURING CO., Cleveland, Ohio
Spring counterbalance. B p32 ... Jul 14
EDO WESTERN CORP., Salt Lake City, Utah
Underground scanner. B p33 ... Nov 24
ENGINEERING SCIENCES DATA UNIT LTD., London, England
Engineering data packages offered for 700 disciplines. p31 ... Dec 8
ENVIRONMENTAL MEASUREMENT SYSTEMS, Seattle, Wash.
Manhole monitor. B p29 ... Aug 25
FABICK, JOHN, TRACTOR CO., St. Louis County, Mo.
Tractor aids welder in his work,*. p28 ... Nov 24
FAGERSTA, INC., West Caldwell, N.J.
Expansion anchors. B p26 ... Nov 3
FORWARD ENTERPRISES OF TEXAS, INC., Houston, Tex.
Pole-setting system. B p29 ... Aug 25
FORWARD INC., Huron, S.D.
Front end discharge mixer hugs the ground,*. p28 ... Oct 27
FRANKLIN MILLER, INC.
Solids crusher. B p139 ... Sep 22

GARDNER-DENVER CO., Denver, Colo.
Crawler drills. B p37 ... Jul 7
GENERAL, THE, INC., Wichita, Kan.
Loader-backhoe. B p33 ... Nov 24
GENERAL ELECTRIC
Sodium lamps. B p84 ... Oct 6
GEO SPACE CORP., Houston, Tex.
All-terrain hauler. B p32 ... Jul 14
GOLDBLATT TOOL CO., Kansas City, Kan.
Power troweler. B p32 ... Jul 21
GOMACO CORP., Ida Grove, Iowa
Concrete spreader. B p33 ... Oct 27
GRANAU CO., Milwaukee, Wis.
Sprinkler head. B p37 ... Jul 7
GRIPHOIST, INC., Westwood, Mass.
Power hoist. B p33 ... Nov 24
GRIZZLY CORP., Jacksonville, Ill.
Trencher. B p29 ... Dec 15
GROOV-PIN CORP., Ridgefield, N.J.
Rivet nuts. B p37 ... Jul 7
GROVE MANUFACTURING CO., Shady Grove, Pa.
Telescoping-boom crane sports 88-ft power-luffing jib,*. p26 ... Dec 15

HACH CHEMICAL CO., Ames, Iowa
Water test kits. B p29 ... Aug 25
HAMILTON INDUSTRIES, Two Rivers, Wis.
Device for handicapped,*. B p32 ... Oct 13
P & H HARNISCHFEGER, Milwaukee, Wis.
Compact wheel cranes are nimble,*. p32 ... Jul 14
HARSCO CORP., Columbus, Ohio
Dock seal. B p29 ... Aug 25
HARVEY HUBBELL, INC., Bridgeport, Conn.
Power outlet panels. B p29 ... Dec 15
HEWLETT PACKARD, Palo Alto, Calif.
Theodolite measures, computes,*. p26 ... Nov 3
Computer houses display/printer,*. p47 ... Oct 20
HEWLETT-PACKARD, Paramus, N.J.
Calculator on the wrist,*. p46 ... Sep 8
HONEYWELL COMMERCIAL DIVISION, Minneapolis, Minn.
Fire alarm system. B p26 ... Nov 3
HUGHES TOOL CO., Houston, Tex.
Auger drill can go 30 feet, many accessories available,*. p32 ... Nov 24

ILLINOIS TOLL WORKS INC., Elk Grove, Ill.
Insulation fasteners prevent overdriving,*. p25 ... Sep 29
INSLEY MANUFACTURING, Indianapolis, Ind.
Backhoe,*. B p33 ... Oct 27
INVENTION MARKETING INC.
Scaffolding. B p84 ... Oct 6
IOWA MANUFACTURING CO.
Automated roller control. B p134 ... Sep 22

JLG INDUSTRIES, McConnellsburg, Pa.
Hydraulic lifts aid bridge repair,*. p32 ... Nov 24
JAMES ELECTRONICS INC., Chicago, Ill.
Portable rebar locator eases hardware mounting,*. p45 ... Aug 18
JARVA, INC., Solon, Ohio
Rock borer designed for utility construction,*. p28 ... Nov 24
JOHNS-MANVILLE
Pre-insulated pressure pipe. B p134 ... Sep 22
JOY MANUFACTURING CO.
Exploration drill. B p139 ... Sep 22

KAWNEER ARCHITECTURAL PRODUCTS
Thermal curtain wall. B p139 ... Sep 22
KEENE CORP., Vienna, W. Va.
Expansion joint overcomes plaster shrinkage separation. p47 ... Oct 20
KEUFFEL & ESSER CO., Morristown, N.J.
Transit level. B p33 ... Nov 24
Electronic device gages surveying distances. p31 ... Dec 8
KLINGER SCIENTIFIC CORP., Jamaica, N.Y.
Laser beam expanders. B p32 ... Jul 14
KOEHRING CO.
Articulated roller. B p84 ... Oct 6
KORWALL OF INDIANA, Elkhart, Ind.
Insulation boards. B p29 ... Dec 15

LA MOTTE CHEMICAL PRODUCTS CO., Chestertown, Md.
Effluent monitor. B p26 ... Nov 3
LINCOLN ST. LOUIS, St. Louis, Mo.
Materials pump. B p33 ... Nov 24
LULL ENGINEERING CO., St. Paul, Minn.
Lift,*. B p26 ... Nov 3
LYNTECH CORP., Tulsa, Okla.
Pipeline manipulator. B p32 ... Oct 13

M-R-S MANUFACTURING CO., Flora, Miss.
Scraper. B p32 ... Jul 14
MARATHON MANUFACTURING CO., Houston, Tex.
Steel buildings. B p33 ... Nov 24
MARTIN-DECKER CO., Santa Ana, Calif.
Boom angle indicator. B p32 ... Jul 21
MCLAUGHLIN MFG. CO., Plainfield, Ill.
Backhoe power unit drives small-diameter boring system. p25 ... Sep 29
MCNEIL CORP., St. Louis, Mo.
Materials pump. B p33 ... Nov 24

MELROE MULTI-WHEEL, Longmont, Colo.
Bulldozer. B p55 ... Sep 8
MIDLAND-ROSS CORP., New Brunswick, N.J.
Energy recovery system. p24 ... Aug 25
MILLER ELECTRIC MFG. CO., Appleton, Wis.
Welding current control done remotely by cordless device. p45 ... Aug 18
MITCHELL ENGINEERING CO., Columbus, Miss.
Roof seams. B p32 ... Oct 13
MOBIL OIL CORP., New York, N.Y.
Synthetic lubricants cut fuel use up to 9%,*. p28 ... Oct 27
MULLER MACHINERY CO., INC., Metuchen, N.J.
Power trowel. B p33 ... Nov 24

NATIONAL STEEL PRODUCTS CO., Houston, Tex.
Composite panel can lower energy cost,*. p26 ... Dec 15
NEOTRONICS LTD.
Gas monitor. B p139 ... Sep 22
NIBCO INC., Elkhart, Ind.
Ball valves. B p55 ... Sep 8
NITTO KOHKI, USA, INC.
Finishing sander. B p134 ... Sep 22
Hydraulic puncher. B p33 ... Nov 24

OHIO HOIST MFG. CO., Lisbon, Ohio
Hoist drum sports disk brake. p54 ... Nov 17
OLYMPIC PREFABRICATORS, INC., Seattle, Wash.
Hinged prefabs unfold at site,*. p46 ... Sep 8
OLYMPIC STEEL BUILDINGS, Seattle, Wash.
Hinged prefabs unfold at site,*. p46 ... Sep 8
ONTARIO EQUIPMENT, INC., Orland Park, Ill.
Truck hoist. B p33 ... Nov 24
OWENS-CORNING FIBERGLAS CORP., Toledo, Ohio
Insulation sheathing. B p55 ... Sep 8
OXO WELDING EQUIPMENT CO.
Wire support assembly. B p139 ... Sep 22

PAC-CRAFT PRODUCTS, INC., West Bend, Wis.
Work platform. B p32 ... Jul 14
PETTIBONE CORP., Chicago, Ill.
Lift. B p29 ... Dec 15
POCLAIN, Fredericksburg, Va.
Wide line of excavator attachments available,*. p54 ... Nov 17
POWER CURBERS, INC., Salisbury, N.C.
Curbing machine handles variety of tasks,*. p31 ... Dec 8
POWER-STRUT, Warren, Ohio
Space frame. B p29 ... Dec 15
PURECYCLE, Boulder, Colo.
Domestic wastewater recycling. p54 ... Nov 17

RAMPMASTER INC., Fort Lauderdale, Fla.
Lightweight bridge can be raised with ease,*. p32 ... Nov 24
RAYGO, INC., Minneapolis, Minn.
Paver. B p29 ... Dec 15
REGENT JACK MFG. CO.
Compact crane. B p84 ... Oct 6
RIXSON-FIRE MARK, INC., Franklin Park, Ill.
Threshold anchor. B p29 ... Dec 15
ROYAL INDUSTRIES, Gardena, Calif.
Concrete pump pushes 28 cu yd per hour. p46 ... Sep 8

SARGENT INDUSTRIES, Huntington Park, Calif.
Pressure reduction valve. B p55 ... Sep 8
SCHWING AMERICA, INC., St. Paul, Minn.
Concrete pump,*. B p29 ... Dec 15
SEMS PRODUCTS, Rockford, Ill.
Wire terminals. B p29 ... Dec 15
SHOVEL SUPPLY CO., Dallas, Tex.
Full hydraulic system speeds tandem roller towing setup,*. p45 ... Aug 18
Tandem vibratory roller. B p32 ... Oct 13
SINCO, INC., East Hampton, Conn.
Positioning belt. B p26 ... Nov 3
SMITH, JAY R., MFG. CO., Piscataway, N.J.
Supports for handicapped. B p29 ... Aug 25
SOILTEST, INC., Evanston, Ill.
Cement/concrete tester,*. B p32 ... Jul 21
SPECIALTY PRODUCTS CO., Jersey City, N.J.
Fasteners. B p56 ... Nov 17
STANDARD DRY WALL PRODUCTS, Miami, Fla.
Hydraulic grout. B p33 ... Oct 27
SYRO STEEL CO., Girard, Ohio
Noise silencers. B p37 ... Jul 7

TECO, Washington, D.C.
Joist hanger. B p32 ... Oct 13
THERMAL-CHEM, INC., Elk Grove Village, Ill.
Crack repair system. B p56 ... Nov 17
THERMOCYCLE, INC., New York, N.Y.
Water purifying system cuts cooling costs,*. p53 ... Nov 17
THOMSEN DIVISION, Gardena, Calif.
Concrete pump pushes 28 cu yd per hour. p46 ... Sep 8
3M CO.
Duct sealer. B p84 ... Oct 6
TIMELAPSE, INC., Mountain View, Calif.
Construction camera,*. B p55 ... Sep 8
TRIMBLE-HOUSE CORP.
Parking lot lighter,*. B p139 ... Sep 22

UNISTRUT CORP., Wayne, Mich.
Steel channel. B p56 ... Nov 17
UNISUL INC.
Fireproof-spraying machines. B p139 ... Sep 22

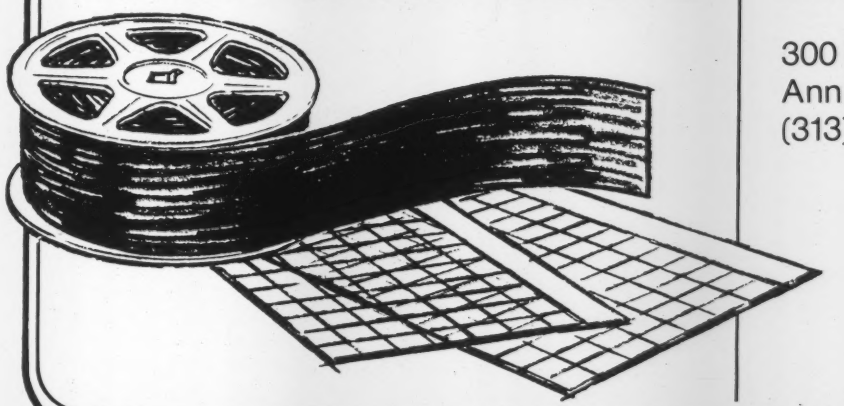
VAN HUFFEL TUBE CORP., Warren, Ohio
Space frame. B p29 ... Dec 15

WABCO CONSTRUCTION AND MINING EQUIPMENT, Peoria, Ill.
Scraper fills large capacity needs,*. p53 ... Nov 17
WACKER CORP., Milwaukee, Wis.
Compactor,*. B p29 ... Dec 15
WALTER, JIM, CORP., Tampa, Fla.
Insulation board. B p32 ... Jul 21
WARNER & SWASEY, Solon, Ohio
Crawler has 15-ft loading height,*. p25 ... Sep 29
WASHINGTON LOGGING EQUIPMENT, INC.
Logging yarder,*. B p134 ... Sep 22
WATER GUIDANCE SYSTEMS, INC., Branford, Conn.
Waterproof roof membrane adheres to lightweight decks. p25 ... Sep 29
PVC membrane. B p56 ... Nov 17

YOUNG CORP.
Hydraulic grapples. B p134 ... Sep 22

ZORELCO LTD.
Viscosity cup. B p134 ... Sep 22
Wet film gage. B p84 ... Oct 6
ZORMCO, Cleveland, Ohio
Thickness gage. B p32 ... Jul 21

This Publication is Available in MICROFORM



...from

Xerox University Microfilms

300 North Zeeb Rd.,
Ann Arbor, Mich. 48106
(313) 761-4700

PLEASE WRITE FOR COMPLETE INFORMATION

Published By ENGINEERING NEWS-RECORD Copyright McGraw-Hill, Inc. 1978